A Magazine for Health and Happiness

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Fathers

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Mothers

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Students

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Everybody

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Here's Our Wish for You—

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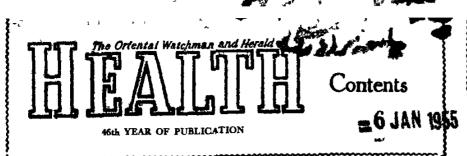
The Oriental Watchman and Herald

HEALTH

46th YEAR OF PUBLICATION

Contents

January 1955

L J LARSON, M A, B Sc Editor

DUNBAR SMITH, M D, D N B, D T M & H (LOND) Associate Editor

J B OLIVER, M D, D T M Associate Editor

FEATURE ARTICLES

OUR COVER

"These are weighty secrets, and we must whisper them"

—Sarah Chauncey Woolsey, "Secrets"

Photo by Chaturbhai P Patel

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Minute Meditations

WATCH YOUR THOUGHTS

D. A. Delafield

DID anyone ever offer you a penny for your thoughts? Remember how you began to take inventory to see just what you were thinking about? You made a great discovery. You found one of three things when you looked inside your mind. You were thinking great thoughts, and were pleased with yourself; you were doing some wrong thinking, and were secretly embarrassed; or you weren't doing much thinking at all, and were confused. Whatever your state of mind, you spurned the offer and reminded the bartering friend that your thoughts were not for sale.

Yet too often our thoughts betray us and reveal the inner workings of the mind and conscience. For example, in a time of great pressure your thoughts and feelings concerning a certain individual will be expressed in deeds of deep affection—or in words and looks that are bitter with ill-will. To control your actions and emotions, start controlling your thoughts, for a crisis will bring a severe test to you.

Frequently we hear people explain away some embarrassing misdeed with the excuse, "I just didn't think." The truth of the matter is they probably were thinking about it for a long time. Their words simply betrayed their feelings over a long-standing grievance or insult.

We have all seen the little sign "Think" hanging on the walls of factory and shop Its intention, of course, is to remind folks of disasters that may result from a thoughtless and negligent course. The sign is actually saying, "Keep your mind on your work. Keep alert. You are a member of a team. Death and tragedy are too

(Continued on p 5)

THE EDITOR SAYS

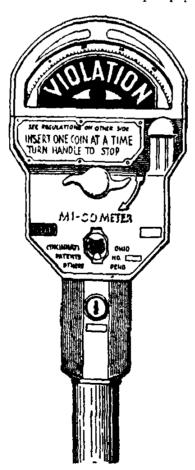
"Gone! gone forever!—like a rushing wave
Another year has burst upon the shore
Of earthly being—and its last low tones,
Wandering in broken accents in the air,
Are dying to an echo"
—George D Prentice, *Flight of Years*

WE STAND today on the threshold of a brand new year, a new year of opportunity and success for every one of us Gone forever never to return, are the 365 days of 1954, each filled with its 86,400 seconds of precious time which we have had at our disposal to use just as we pleased

Before we launch out on the experiences that 1955 has in store for us, let us stop where we are and pause for a brief moment of retrospect and examination, to discover whether we have really appreciated this great gift—Time or have uselessly, listlessly squandered the moments that could have brought great gain to us Let us each contemplate the year that has sped to eternity and it is only as we do this with care and precision that we will be in a position to correctly evaluate and utilize the precious moments of 1955

Most people in the world have never had to pay for time They drive to town in their carriages or cars, park in any suitable location, and take as many hours as they wish to do their business or their shopping without having to take out any cash and pay for their time There are no meters that record the parking time and no red indicators on the parking-sign post with the word "violation"

But today in some of the cities of America people are confronted with this problem A man drives his car into town, selects a place by the pavement to park his car, and then has to put a coin into the slot of the meter on the iron parking post before he goes off to do his shopping When he returns after what seems to be only a few minutes spent on his shopping, there is the startling red word "Violation" staring at him from the face of the meter.

He approaches the front of the car and he finds a little slip of paper stuck under the arm of the windscreen wiper which invites him to present himself at the traffic office and pay a fine. Time did not stop a moment for him to return with another coin He feels chagrined over the experience and the resentment stays in his mind through the day He says, "Time is such a little thing, something that cannot be seen or heard or felt and yet it is measured and metered and one is penalized for its misuse!"

If it were possible for all our time to be metered and if we had to insert a coin into the slot of a meter for every fleeting moment, we would take more care and thought of the way we utilized every minute of our time

We are prone to think that a minute is a very little thing, something small and insignificant and not worth bothering about, and yet the minutes added together make hours, the hours make days, and days are the components of years The little indiscretions that we commit in the trifling minutes of thoughtlessness—the impure thought or glance, the harsh and hasty word, and the mean and unkind deed—go to mar our characters and are all chalked up against our account in the records of eternity

Rather let us take care of the little things—the seconds and the minutes—and put each precious moment of our time to good use Chesterfield, in his *Letters to His Son*, gave him some sound advice in this connection "I recommend to you to take care of the minutes, for the hours will take care of themselves" (October 4, 1746) "Know the true value of time; snatch, seize, and enjoy every moment of it No idleness, no laziness, no procrastination never put off till tomorrow what you can do today" (December 26, 1749.)

If we will only take this valuable counsel to ourselves and utilize each moment well and to the best

of our ability, our lives will be crowned with success and happiness, and gone will be the vain regrets that assail so many as they come to the end of their days and take stock of what life has meant to them, as expressed in the lines from *Rock Me to Sleep, Mother:*

"Backward, flow backward,
O full tide of years!
I am so weary of toil and of tears,
Toil without recompense—tears all in vain,
Take them and give me my childhood again."

—Elizabeth Akers Allen

1955, the year of our greatest opportunity, is before us So let us plan that each day we will make the best use of those little minutes that have been entrusted to us, guarding them carefully lest our feet should stray from the path to success and happiness which will be our inevitable reward

P A T C L

Watch Your Thoughts

(Continued from p 3)

great a price to pay for the luxury of idle thoughts."

"Through wisdom is an house builded; and by understanding it is established," said Solomon. "He that never thinks," observed Samuel Johnson, "never can be wise."

Self-control is really the key to thought control. The man who can control himself is stronger than he who conquers a city. But the heart must be right, "for out of it are the issues of life."

One can control his thoughts very largely when his heart has been softened by the love of God. "I know the thoughts that I think toward you," He says, "thoughts of peace, and not of evil." Our loving heavenly Father will transform the turbulent heart of man so that he may have peaceful thoughts toward all his human brothers. Would you be known as a man of understanding, a man of peace? Then ask God to change your heart and make it tender like His own.

WHAT'S IN THE NEWS?

A large collection of bronze weapons and jewellery, believed to date from about 600 B C, was unearthed recently in southeastern Norway The curator of Oslo University's archæological museum reports that the find is one of the largest made in many years

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Taking the temperature of patients in a Granite City, Illinois, hospital was a real problem during one of this summer's heat waves When the temperature in the room went up to 105 degrees, the clinical thermometers all registered the room temperature Since this type of thermometer maintains its reading until it is shaken down, nurses had to resort to a number of devices to get an accurate temperature reading One nurse ran cool water over a thermometer and cooled it to 98 degrees, but it climbed to 105 before she could get it into the patient's mouth. Finally hospital officials devised a plan of using glasses of ice water to keep the thermometers cool until just before the temperature was to be taken.

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In the 1890's there were 150 bicycle manufacturers in the United States Now, says the Washington "Star," there are 10

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The area drained by the Mississippi River system comprises the greatest fertile plain on the earth

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A recent study based on life-insurance records indicates that persons who survive a cancer operation by several years have an encouraging life expectancy

• • • •

Cars today contain more light bulbs than an average five room house, says "Automobile Facts" Most models average 20 lights, but some have as many as 38

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How animals find their way has long been a mystery to man. Recent research has shown that, in some cases at least, the sun plays an important part in direction-finding Honeybees, for example, use sun navigation in flying from the hive to a distant flower patch and back again on a true beeline. It has long been known that bees actually "tell" other members of the hive how to find a rich feeding place by doing a complicated waggle dance. Scientists now have proved, reports the National Geographic Society, that this dance shows the correct direction with relation to the sun's position in the sky Even if the sun is hidden by clouds, polarized light coming through a small patch of blue sky tells bees where the sun actually is And as the day progresses, the dance changes to match the movement of the sun across the sky Ants and spiny lobsters have the same general ability

ERRATUM

The subscription rates for the Health magazines published by the Oriental Watchman Publishing House are as follows and not as listed on page 11 of our December, 1954 issue

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RABIES *Can Be Prevented*

EDWARD R BLOOMQUIST, M.D.

When a dog bites you, keep cool and follow the doctor's rules Above all, don't kill the dog.

TRIX was a new dog in the neighbourhood A gentle, playful pup, she won the hearts of the housewives, from whom she would beg food each morning Within a short time she was considered one of the community She particularly enjoyed lying in the back yard of the Bronson home, and soon the children accepted her as one of the family

Within a few weeks, however, Harry Bronson began to note with some concern that the new pet was behaving strangely First acting suspicious, then sulky, she became openly hostile to the neighbours One morning a day or so after the changes in disposition became noticeable, Trix bit Tommy, the Bronsons' youngest, as he playfully tugged at her ears Wrapping a bandage around the bite, Harry bundled his young son into the car and started for the family doctor's office Backing out of the driveway he passed his neighbour, who was busily cutting the grass Bringing the car to a halt he called to his friend and with some irritation told him the story

"Harry, that dog's dangerous," the neighbour replied. "We had one just like him back on the farm, and he did untold damage before we finally caught him and put him to sleep. Tell you what—you get your shotgun, and I'll help you get rid of her before she bites somebody else"

Following his friend's well-meant but foolish advice, Harry ran back to the house and returned with his gun A few minutes later the dog was no more, and Harry continued on his way to the doctor's office It was not until after the doctor had finished cleaning the wound that Harry discovered how unwise his spur-of-the-moment action was The doctor informed the anxious father that Tommy would have to have at least two weeks of the Pasteur treatment

When Harry thoughtlessly killed the dog he destroyed the only chance to prove whether the dog was rabid True, the head would be examined, and if rabies was found, there would be no doubt On the other hand, the dog had not shown definite symptoms of rabies. Since there was a question, the only choice was to treat the child as if he were infected.

Rabies, or hydrophobia as it is often called, is a peculiar disease. Although it occurs during all months of the year, it is most often noticed in the summer-time. This is undoubtedly due to the unusually close association between man and animals during the summer season But it is not limited to summer, as demonstrated by the finding of cases in the winter season too

Many animals can carry the disease, but 90 per cent of it is transmitted by dogs. The other 10 per cent is accounted for by cats, raccoons, rats, squirrels, and in some cases domestic farm animals such as the horse, cow, and pig.

This disease is one of antiquity, being described as long ago as 300 B C by Aristotle. It was not until 1881, however, that Pasteur proved it to be a disease of the nervous system Working steadily for three years Pasteur showed that rabies could be prevented by inoculating animal-bite victims with a vaccine. Although he was not aware of the causative agent, Pasteur founded a system of treatment that is still recognized as the only way of

preventing death from the bite of a rabid animal.

This disease of the brain and spinal cord is characterized by excitement, paralysis, and death of its victims. Rabies is transmitted from animal to animal by the introduction of virus-laden saliva into the body through fresh bite wounds The virus travels to the nerve endings in the skin, where it multiplies. From there it travels through the nerves to the brain, where, once entrenched, it causes death.

P A T C Lobo

Safeguard your family by having the dogs given an immunizing shot of antirabies vaccine.

Some of the virus leaves the brain and spreads to the salivary glands Arriving there, it is soon passed on to a new victim when the now rabid animal bites. As the virus travels from animal to animal it becomes stronger Wild animals tend to spread the infection among their own kind for some time before a human is involved. A bite from such an animal is more lethal than one from a domestic animal Not only is the germ more resistant but because wild animals attack with more ferocity than pets they create a larger and deeper wound.

The time required for the virus to cause death depends on two factors. the severity of the wound and the nearness of the wound to the brain The most dangerous places are the face and hands, death coming in 60 to 70 per cent of untreated cases in face bite and in 15 to 20 per cent of untreated cases in hand bite. The amount of saliva entering the wound is important too, for persons who receive bites through clothing develop rabies in only 1 per cent of untreated cases as compared to an over-all untreated rate of 15 per cent. Interestingly enough, rabies is seldom developed unless the saliva passes through the broken skin, for unbroken skin provides a barrier against the disease. Poor body resistance aids the virus in spreading more rapidly too, and persons suffering from chronic debilitating diseases, alcoholism, and excess fatigue have a higher death rate than healthy persons

Dogs are affected in two ways. The first and most common is easily recognized; it is the type that affects 80 per cent of animals It is the furious type, called that because the animal is irritable and angry.

The first sign of trouble is an altered disposition in an otherwise friendly dog He becomes sullen, seclusive, and anti-social. Sometimes during the first twenty-four hours of the disease he may be excessively friendly, and his master may find it almost impossible to keep him from his side.

In twenty-four to forty-eight hours, however, the picture changes The animal becomes extremely restless, and comes and goes without reason Although he may obey commands and may not try to bite, he cannot sit still. Becoming unreasonably ill-tempered, he will jump at strangers without cause or warning Then the voice starts to change, the bark ending in a peculiar high plaintive wail

Within seventy-two hours he is snarling at unseen objects, and turns on animals and people with whom he formerly was always friendly

Late in the course of the disease it is impossible to confine him, as he tears up anything within reach and lashes out at anyone near him. If he is free, he will dash at full gallop in a straight line, often travelling for miles before dropping from exhaustion and paralysis. The only thing he will pause for during this mad dash to escape death is to bite anything that stands in his

(Continued on p. 28.)

Handling a Contagious Disease at Home

WHEN a contagious disease strikes a home it always causes a considerable amount of concern and worry and not a few changes and annoying adjustments Two definite problems must be met The first deals with giving the little stricken one the best of care, the second, with protecting the rest of the family from this catching disease

How to Care for the Patient

When a child shows the first signs of illness, these signs may indicate that he is coming down with any one of a dozen or more diseases It may be something relatively mild and fleeting, almost a false alarm, or it may be a bad omen of a dread disease Wise it is to hope for the best, but at all times be prepared for the worst It may be a contagious disease that the mother, the wage-earner, and the other children may catch It may even turn out to be rather serious So play safe, and call your doctor to find out what disease you have to contend with

Even before you have an inkling of the nature of the disease, be cautious, and take care of the sick one Secure for him an optimum amount of comfort and a chance to get well by putting him to bed Keep him away from others to avoid needless additional cases Remember, most contagious diseases are more catching in their early stages, at a time when their identity is not even guessed or suspected In this article you will learn how to take care of a child with a contagious disease and at the same time protect the rest of your family from catching it

How to Protect Those Who Are Exposed to a Contagious Disease

For the safety of all, when a contagious disease is suspected, the house and household are divided into two parts the sick one, who has the disease, and the rest of the family, who do not have it

The child and everything that has come in contact with him or the discharges from his mouth, nose, ears, bowels, and bladder are considered capable of infecting, or giving the disease to others In Biblical times those persons who had leprosy kept others from touching them by the cry, "Unclean! Unclean!" Even today we consider, for safety purposes, the sick to be "unclean," or "dirty," or harbouring disease germs, to those who are "clean," or free from disease, they are in a sense "untouchable"

On the other hand, the members of the family who are free from disease are considered "clean," and must keep away from the sick one They should not touch him, his body discharges, or anything that has come in contact with him Fingers, food, flies, toys, eating utensils, clothing, bed linen, towels, and many other articles can be the means of carrying the disease from one person to another

There must be a definite division between the patient and his room and the family and their living quarters, and this division of the house and household into two distinct parts and parties must continue until the days of quarantine, or isolation, are ended

Care during the Disease

Choose for the patient a room all by himself, preferably one that lies apart from the rest of the house It should be well ventilated, having access to plenty of fresh air and sunshine If it has an adjoining toilet and bath that is not used by the rest of the household, this will facilitate the care of the sick one and make it easier to dispose of the body wastes However, this extra bathroom is not necessary

Remove from the room all unnecessary furniture—rugs, curtains, pictures, and books, in fact, there should remain only a bed, a bedside table, a chair, a dresser, and a hat and coat rack for the nurse's gown, though a hook or a nail just inside the door will answer the purpose Aside from articles for the use of the patient, there should also be a wash-basin for the washing of the nurse's hands, a dish-pan to hold dirty

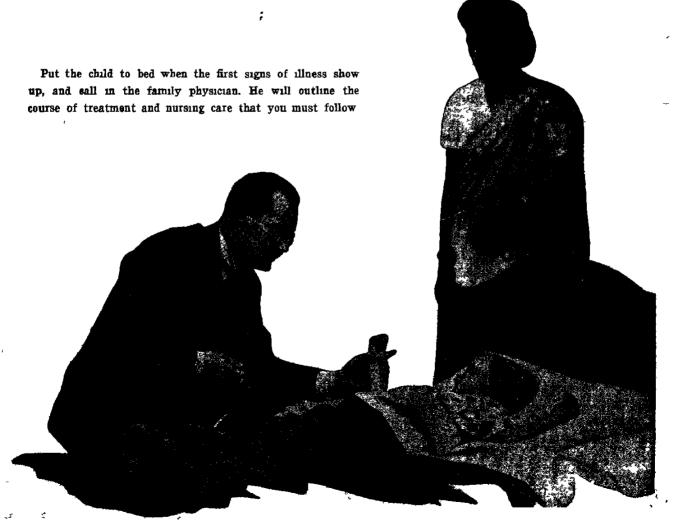
dishes, and a container for dirty linen. All clean linen and clean night clothes should be kept outside the room. A gas or an electric plate for boiling the dishes and heating water in the room facilitates the care of the little patient A paper bag pinned to the side of the bed serves as a convenient container for cloths and tissue paper that have been used to collect discharges from the nose, ears, and mouth These, of course, should be burned, bag and all All dishes must be boiled after being used by the patient The linen must not be washed with that of the rest of the family, but must be kept separate, and be boiled, and washed in soap-suds Your doctor may even recommend soaking the clothes in a disinfectant solution before boiling them It is well to protect the mattress with an oilcloth or a rubber sheet.

Often parents scrape together money that could well be used for necessities to buy their sick child a beautiful doll or an expensive book or toy Now if this is to be a permanent possession of the little one, it will be best to withhold it from him until he is over his contagious disease, especially if his illness promises to be of relatively short duration Only toys that can be disposed of and burned should be given him, and it is remarkable how much pleasure a child can get out of inexpensive and simple toys that are easily disposed of when he is ready to come out of isolation

The nurse or the person acting as the nurse—often it is the mother—should do her part to avoid carrying the disease from the sickroom to the rest of the household These same precautions will also protect her. On entering the sick room she should put on a long gown or coverall apron over her dress, and keep it on till she is ready to leave the room Following this, she must wash her hands thoroughly with soap and water A thorough washing with soap and water is much better than the use of strong disinfectants, since these are hard on the hands, cracking and breaking the skin, which is the first line of defence against disease, and throwing it open to infection.

At last the long-anticipated day of release has arrived, the little one is free from disease germs, the days of isolation are ended, and the quarantine is about to be lifted. What shall the nurse do to make the convalescent child and his

(Continued on p 20)

Put the child to bed when the first signs of illness show up, and call in the family physician. He will outline the course of treatment and nursing care that you must follow

A LITTLE POISON NOW AND THEN

WAYNE McFARLAND, M.D.

ONCE a doctor came to me in great perplexity He had been through a very terrible experience He had to be sent to a special institution where they treated individuals for drug addiction. It all started very innocently The doctor started taking some sleeping tablets when he found he couldn't get to sleep At first it was only a few tablets But when once started, it seemed that without his hardly knowing when or how, the number of tablets increased.

He was taking barbitone I want to tell you it is dangerous to take drugs Any drug that stupefies the nervous system is a dangerous drug This drug is used sparingly by doctors, and under no condition should it be used promiscuously by an individual who finds it difficult to sleep, or who is under extra pressure and wants something to ease the tension

The doctor soon found he needed something a bit more powerful, and barbitone led to morphine, and then came a series of heart-breaking attempts to stop His wife and children saw their loved one bound in a chain of habit almost irresistible. These pills can kill.

From the *Sunday Express* I quote

"Every night one million people in Britain take sleeping pills—pills that can kill Now a special hospital unit is being set up to deal with addicts.

"About £2,000,000 a year is being spent on barbiturate drugs. Said an authority last week 'There have been a disquieting number of deaths, particularly among women

Too many patients are getting the things and swallowing them wholesale Many are unconscious for seven to eight days'

"Some die—too many"

Crawl into a bath of warm water for thirty to forty minutes, or even an hour, rather than take a sleeping pill It is better to miss some sleep, than to form the habit of taking sedative drugs

But there are not only drugs that put the nerves to sleep Many people are using drugs to get the nerves awake Such drugs we call stimulants, and I must help you to see how they are ruining people's nerves and making them tired, irritable, and prematurely old

I speak of caffeine which is a drug so powerful that the physician reserves it to use by hypodermic needle when an individual's heart fails on the operating table. One dose of five to ten grains will make

the heart contract and may save a person's life, but if the individual has been taking caffeine in those amounts daily, then the drug is not effective, and his life may be lost because he has built up a tolerance to caffeine

"No one would do that surely," you say No, he wouldn't if he knew better.

For caffeine is a stimulant to the nerves Even though they need rest, caffeine makes them keep on working Caffeine whips up muscles to keep moving when they are crying to relax. It makes a brain keep on working after it has begged for just a little respite It aggravates nervous or over-worked stomachs, and gives one a sense of energy which the body does not have It cuts into your reserves and affects your heart

Whether taken in large or small quantities its effects are always the same. For many it is only a little poison now and then And though taken with meals or between, it is lacking in vitamins, minerals, or food value of any kind. It is a drug

And where do we find this caffeine, you ask? In coffee, tea, and cola drinks "Ah," someone sighs, "I was afraid of this I just had an idea that sooner or later we would find out about tea and coffee."

But I am sure you'll agree with me when once you have experienced the release that comes from overcoming a habit that is harmful to you

But first some authoritative statements on this subject I read on pages 169, 170 of the *British Pharmaceutical Codes,* the most authoritative text on drugs printed in Britain, the following about caffeine as found in tea, coffee, and cola drinks

"Caffeine acts on the central nervous system, on muscle including cardiac muscle, and on the kidneys. The action on the central nervous system is mainly on the higher centres, and produces a condition of wakefulness and increased mental activity With large doses of caffeine the action extends from the physical areas to the motor area, the medulla and the cord, and the patient becomes at first restless, and later may show convulsive movements In case of poisoning by caffeine, an emetic should be administered and warmth applied to the extremities"

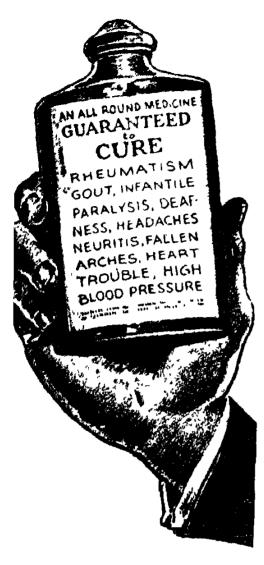
This says plainly that the brain nerves, the muscles, the heart, and the kidneys are affected by the drug caffeine

Listen to this "Excitation of the central nervous system is usually followed by depression"—Goodman and Gilman in *The Pharmacological Basis of Therapeutics,* page 276.

"Insomnia, restlessness, and excitement are the earliest symptoms and may progress to a mild delirium. Tachycardia and extra systoles [irregular heart function] are frequent, and the respiration is quickened The diuretic action of the drug may be prominent"—*Ibid*, page 280

You can see that what is happening is that we have stimulation followed by a "let down," and the "let down" goes down further each time in many cases. You are unable to use your nerves as God intended you should You are making them tell a lie They are exhausted, but they tell you, "No, we're fine" This is exactly what Dr David Starr Jordan says in his comments on these drugs

"Coffee and tea enable one to borrow from his future store of force for present purposes. And none of these make any provision for paying back the loan One and all, these various drugs tend to give the impression of a power, or a pleasure, or an activity, which we do not possess One and all, the result of their habitual use is to render the nervous system incapable of ever telling the truth One and all, their supposed pleasures are followed by a reaction of subjective pains as spurious and as unreal as the pleasures which they follow With each of them the first use makes the second easier To yield to temptation makes it easier to yield again The weakening effect on the will is greater than the injury to the body."—*A*

(Continued on p 28)

HIGH BLOOD PRESSURE

OWEN S. PARRETT, M.D.

MAN, the animal that worries! Lower animals do not know enough to do that, and their not worrying is no loss to them

What about worry? First, let us mention some of the main causes of high blood pressure, since there is no single cause Heredity should come first A simple test recently carried out among school children showed 18 per cent with a tendency toward essential hypertension This test consisted in immersing the hand in cold water which causes an abnormal rise in pressure if there is a tendency to high blood pressure It is largely from the group who react positively to this test that future high-pressure recruits will come Outside this group very few cases will develop, and this valuable test may be used to determine those susceptible In this way, treatment might start long before the disease is manifest, and, after all, the only cases really cured are those thus treated early This same principle holds good in case of all chronic diseases Since none of us arrive in time to pick our ancestors, it may be observed that this most important factor is beyond our control

Emotional strain might easily be second in importance Here we are dealing with something we can control, unless we let our nerves control us, which is a very bad practice The writer knows of a case in which worry brought the pressure up to one hundred and seventy in a young person of normal heredity As soon as this victim of worry knew what was happening, he switched off the worry current almost at once, and within a week normal pressure resulted

Someone has written

"The worry cow would have lived till now,
If she'd only saved her breath,
She feared her hay wouldn't last all day,
And choked herself to death."

There are two things about which we should never worry The first is what we can help, and the second is what we cannot help The destructive effects of fear and worry are only beginning to be appreciated by medical men The Prince of philosophers, who made the human mind and who knew the effect of worry upon it, not only urgently counselled against worry, but agreed to free us from cause for it As an assurance of His interest in our affairs, He reminds us that a constant count is kept even of the hairs of our head No stronger assurance could be given. It is because of this care that the heart

beats, and breath follows breath whether we are awake or asleep We can safely trust Him.

Essential hypertension means high blood pressure without apparent cause, such as organic disease of blood vessels or kidneys Eighty-five per cent of high pressure is of this variety Streamlined living, the rush of which seems to have involved us all, is especially aggravating to this type of blood pressure. Better than to try to pass all the 25 horse-power shays with our 8 horse-power model, would be to excel in the art of relaxation, with resulting good effects on our blood pressure For example, plenty of sleep, up to nine or ten hours daily, is helpful

The tower of civilization which men have built and of which they are proud would seem about to crush them. In one country, for example, jittery nerves apparently require annually fifteen billion rupees' worth of the eighteen poisons found in tobacco, while they attempt at the same time to drown their troubles in another fifteen billion rupees' worth of alcoholic liquors. In spite of all the paid advertisements, tobacco's poisons fail to soothe the nerves, except some that it soothes forever, and since troubles can swim in alcohol, you can't drown them in liquor. The depression of money for food seems to leave plenty for tobacco and alcohol, the two Siamese twins of poison and race degeneracy.

Since tobacco contracts the blood vessels, it tends to raise the blood pressure As alcohol dilates the blood vessels, some advise drinking liquor to offset the bad effects of smoking Surely here is strange wisdom!

A new operation has been devised for cutting some of the sympathetic nerves to produce relaxation, and doubtless a few have had their lives extended by this rather radical procedure, which likely will never be applicable to a large group of cases Medical measures must be our main dependence Resort to soothing drugs, though affording temporary relief, adds an element of danger As a rule, such drugs should be avoided in all chronic disease

Some may claim that in this disease in which heredity plays so large a part, diet matters little This is altogether wrong, as diet cannot be ignored in any disease, acute or chronic, no matter what the cause Two factors in diet are important in this disease, namely, quantity of food, and quality of food First, as to quantity one should eat the least amount possible consistent with maintenance of normal weight, and it may be a distinct advantage to carry a weight even a little under normal The quality, however, must ensure an adequate supply of vitamins, mineral salts, and moderate bulkage, and should preferably be predominant in alkaline ash

To secure such a diet means to make free use of fruits and their juices, green, tender vegetables cooked or as raw salad, and milk These are all alkaline foods Since cereals are slightly acid, they should be eaten sparingly, and they should include the entire grain. Nuts are excellent foods, but they should be used in small quantities

(Continued on p 24)

USIS

Worry, emotional strain, the speed of living, wrong diet are some of the causes of high blood pressure. See your family physician at the first signs of this disease.

HOW TO HAVE A SUPPLE BACK AND SHAPELY LIMBS

L E EUBANKS

EXERCISING the back mildly and regularly improves both health and efficiency. Effects on the spinal column, were there no other benefits, would justify some attention to the back muscles. The resultant improvement in the body's carriage also encourages deeper breathing and reduces fatigue. The psychological effect of possessing *normal* muscular strength is at its best when that fitness lies particularly in the back, one feels generally energetic and vigorous.

The simplest back movement is known as the bow—standing erect and touching toes without bending the knees. You can do it for a few days as a start, but it will not accomplish much until you use a little weight. Any object affording a convenient hold for both hands will do; merely regulate the weight so that you can repeat twelve or fifteen times without much fatigue Let the weight settle on the floor momentarily each time down

An exercise which develops certain muscles of the back often neglected is as follows Be discreet with it and you will acquire highly gratifying results Stand erect holding a light weight, preferably of a bar-shape (with both hands) near the front of your thighs, palms outward. Now hold the elbows stiff and lift the weight to shoulder height Lower it slowly, relax completely, then repeat. Use a weight with which you can repeat six times. Work up to ten. Then add a little more weight and work up again *from six to ten*. Continue this system as long as you can without straining.

Next try this Stand erect, feet

together. Straighten arms and place palms together. Being careful to keep hips stationary, swing the arms (stiff at elbows) to the right. Carry them as far as possible, then count four while you hold the posture. Swing to the left, holding the limit of twist for a four count, and continue until reasonably tired Remember to twist at the waist, not the knees

One of the best of all exercises for the upper back, those muscles around the shoulder-blades, can be taken with a wall exerciser or a chest expander by opening the arms (elbows stiff) against the resistance and carrying the hands as far backward as possible each time. This is an exercise frequently given for chest development Only recently I advised it, with an elastic exerciser, for a stenographer who had complained that sitting for hours at her desk caused an aching in the upper back After two weeks of daily work on those weak muscles she reported "no more ache"—just another of the many proofs of the value of exercise to sedentary workers

I have always believed walking and running the most natural leg exercises, and for the purposes of health and normal development a vigorous walk of two or three miles a day should be sufficient The reason that most people get so little benefit from walking is that they loiter, put no purpose and snap into the leg movements, and carry the body incorrectly

Hill-climbing can be made very helpful, not only in strengthening the legs and back, but as a general health exercise The easy way to ascend is very short steps, but if you are climbing for leg improvement you should deliberately make the climb harder by reaching well forward with each foot Immediately you will notice the increased strain on the thighs.

Many know of only one movement for the thighs, the deep knee bend—squatting until you are virtually sitting on your heels then rising That is very good for the front thighs, the extensor muscles, but my suggestion is that you use it only every other day, alternating with the following·

Stand facing the back of a dining-room chair. Lift your right leg, stiff at knee, and pass your foot over the chair-back. From the starting position, repeat rather rapidly until the upper section of front thigh is slightly tired The deep knee bend affects the extensor nearer the knee Do the movement the same number of times with the left leg

The back of the thigh, between knee-joint and buttock, is just as important to the strength and beauty of the leg as the extensor, though much more commonly neglected The biceps of the lower limb acts much as does the biceps of the arm, bending and flexing the calf of the thigh

Standing on one foot, with a hand on a chair-back to retain your balance, hold the thigh stationary while you bring heel up close to buttock Standing on a book, or block of wood will enable you to work the leg fast without kicking the floor, and the more speed you put into this movement the more effective it will be Use each leg until its biceps muscle aches slightly.

All exercises for the small of the back, such as the bow, use the biceps of the thigh also, and on the days when you work the lumbar muscles it will be unnecessary to do much specifically for the back thighs

Pipe-stem calves have been the main cause for many a person's start on physical culture exercises Almost any kind of athletic costume betrays the condition of our nether extremities and some persons are highly sensitive on such matters

We know that the function of

the calf muscle is to extend the foot, press it forward or downward as in walking Thus when you take a step the heel (and body) is raised by leverage, and the farther from the toes the joint is, the poorer leverage With poor leverage a calf muscle must contract more vigorously to lift a given weight than if the leverage were good, and consequently becomes larger

Personally I can't see why anyone should care for big bulging

calves, but we all desire normal size and strength. If nature made you long-heeled you would have to do extremely strenuous work on the calves to enlarge them very much and success, if won, would not be worth the effort involved

However, if you give the calves special attention, don't depend much on the usual exercise of rising on the toes Many people have done this hundreds of times a day for months without appreciable

(Continued on p 27)

How to Have a Healthy Child

JEAN MARIE PETRIK HOAG, M.D.

Your child can meet life squarely and with courage if he has the one essential—security.

COMPLETE health security for our children is the goal of each of us as parents. Total fitness requires harmonious physical functioning plus a high degree of emotional stability. It means having our children grow up to be able to "take life": our girls to become home-makers, and our boys wage-earners.

What is more exacting than the mother's role—mother, whose day requires alertness as soon as the first wee one awakens until after the last one is tucked in bed? Mother, who may be dietitian, seamstress, and nurse—to say nothing of music coach and business manager!

What is more endless than the father's routine—father, who must work away from home for long hours, possibly at difficult tasks in atmospheres of tension or confusion, who must persevere until his duties are accomplished satisfactorily, and then return home able to cope with his family pleasantly—to be sports adviser, carpenter, repairman, and spiritual guide—a pillar of strength to his brood? This ability to "stand the gaff" is something not attained in a moment, but is accomplished in the whole process of growth and development.

Growth in general advances with change, progress, and maturity. Sometimes it takes a tangible form, in simple increase in size. Often it takes a less evident form, in more ability to deal with a changing world, such as adjustment to a new brother or sister, to nursery school, to boarding school, to the first date, to marriage, to the first baby, and on through life.

As we grow older, we should grow stronger, and kinder. We grow in our capacity to take care of our physical wants, to adapt ourselves to surroundings, to conduct ourselves properly in relation to others, and to increase our productive power and working efficiency. Much of our growth expresses itself in our actions, in what we do, in what has been called our pattern of behaviour. It is an orderly march to a desirable end.

As this process continues throughout life, am I continuing to grow in understanding of my children, in my leadership ability, spiritually? What kind of example of growth and fitness am I?

Children grow by fits and starts. Suddenly trouser legs have to be let down and an old sweater has to be passed on to the next younger one. In children there is much variation in growth and development—in different age groups, between the sexes, at different seasons, and in various body proportions. Children grow most rapidly before three years and between ten and fifteen years.

It is thought by some that weight gain is greatest in autumn, somewhat less in summer, and least in winter and spring. The greatest increase in height occurs during winter and spring.

Girls grow more rapidly from about nine or ten to fourteen or fifteen, and experience the adolescent spurt one to three years earlier than boys. This difference in size between girls and boys is most noticeable in junior high school, and the tall girls and short boys of the same age may produce problems in social relationships. It is important to help boys and girls understand that the growth differences are normal, and to assure them that the boys will probably grow three times as much as the girls between the ages of fifteen and eighteen.

The infant up to a year has a head circumference larger than his chest circumference. His chest is as thick as it is wide, and his trunk is much longer than his legs. Certainly quite a change takes place to produce adult form! Continual

change in body size and proportion makes for the child a continuous adjustment to himself and others

Size and strength of individuals are important considerations in understanding attitudes It is no wonder that the kindergarten child looks up to the big boys, the high school boys, who may be twice as heavy as he and a third taller Children do not like to feel different, and should be told that difference in growth is normal

Some families have a weakness for certain diseases, such as rheumatic fever, tuberculosis, diabetes, heart trouble, allergies, cancer, obesity, and high blood pressure The parents in such families must be extra alert

Of the five factors in a child's life we parents desire to control, possibly the easiest is *freedom from physical defects* Second, we wish *to protect our children against disease and accident* Probably our own example is the best way we may educate our children to ways of *proper eating* We may do much to guide our children in *beneficial rest and play* By a calm, happy home atmosphere full of consideration for each other we may assure *mental security* for our families

Right from infancy your child has to be safeguarded in every way to help him to grow up to be able to "take life."

Consider *freedom from physical defects* Americans have a high standard of physical fitness, but it is startling to note that the rejections for general military duty in the second world war were as many as in the first Of these rejectees, 700,000 had defects that should have been treated during pre-school or school years

The most frequent defect is tooth decay, and it is possible for all of us to promote (1) immediate brushing or rinsing of the mouth after eating, (2) limiting of sweets, suggesting popcorn, nuts, and fruits instead of sweets, and (3) routine checks and repairs

One out of every twenty children has a hearing defect Parents cannot give scientific hearing tests, but they can be alert to warning signals such as slowness in starting to talk, indistinct speech, or repeated throat and ear infections Watchful parents will notice abnormal squinting and blinking long before a child is checked in school for inadequate vision Of most importance are complete regular checks of the child by a qualified doctor

In assuring *freedom from disease and accident* it should be remembered that the primary years have high sickness rates and low death rates, but of the deaths five out of eleven are due to accidents!

The ordinary communicable diseases are common, their real danger being in complications The common cold is the offender at the top of the list It may be discouraged by our efforts to cut down exposure to colds, provide adequate clothing (not dressing too warmly), not forgetting to furnish supplementary vitamins, and to guarantee adequate rest

Specific protective measures are available for whooping cough, diphtheria, tetanus, and small-pox In the high school group accidents and tuberculosis are the greatest killers Let this remind you of chest X-rays

By the table we set daily, three times a day, we may guide in *ways of proper eating* The meals we mothers prepare will mould the food choices and tastes of our children Forty per cent of American people are declared to be poorly nourished—in a country of plentiful food There is a close relation of poor nutrition to reduced working efficiency and illness Some industries supplement the diet of their employees, and the efficiency of their work goes up

Extra feeding of school children works the same way. The children who leave home on an early bus and return after one o'clock for lunch are a good group to illustrate improved efficiency by extra feeding A properly timed, wisely chosen mid-morning snack results in happier, more alert, co-operative children It eliminates much quarrelling, listlessness, and restlessness Fruit or fruit juices are good choices

(Continued on p 24)

SEVEN WAYS TO HEALTH and HAPPINESS

C R ANDERSON, M.D.

HAVE you noticed that many of us only begin to appreciate our health when we are in danger of losing it? Then we are suddenly willing to pay any price, pouring out the savings of a lifetime to try to win it back again Our health is our greatest possession. Why should we throw it away because of neglect or ignorance of the laws of nature? There is absolutely no substitute for good health It is a priceless gift from God Once we have lost it we cannot buy it back again with money We must take care of it while we have it Our whole future depends upon our maintaining a sound mind in a healthy body

Hospitals all over the world are filled with people who have despised and disregarded the laws of health Some of them may not have realized their danger Others perhaps knew it but didn't care They thought that they could dodge the consequences and perhaps they did for a while, but eventually even the strongest constitution will break, if we continue to disregard the laws of health Many a chronic invalid might have enjoyed good health all through his life, if he had only known how to keep himself out of trouble Instead of enjoying life he has perhaps now become a burden to himself and to the community That's why it is most important that every one of us should learn all we can about the body and how it works This will enable us to avoid a great deal of trouble and expense It will help us to live out our years in peace and contentment, free from unnecessary pain

There are many different ways in which illness may overtake us Some diseases are due to specific infections, such as cholera, or typhus, or tuberculosis, or malaria. Other illnesses are due to injuries, such as broken bones, or cuts or burns, or bites of animals or insects For most of these conditions, modern medical science has a remedy, but there are many other illnesses which arise from our own foolish ways of living

For instance, our habits of eating and drinking may have much to do with why we are sick Prolonged self-indulgence leaves the body weakened and unable to overcome serious infections This is a common cause of illness and pain But unfortunately, too many of us are more interested in getting rid of the effects of the disease rather than in removing its cause Especially is this so, if the cause is due to some cherished habit which we are reluctant to give up We may be quite willing to agree that some habits may be harmful to others but not to ourselves How strangely we reason when we want to explain away our own foolish behaviour!

Do Not Depend on Drugs

Most diseases produce weakness and pain These are Nature's danger signals They urge us to change our ways. But instead of taking the hint, some of us are tempted to run off to the medicine cabinet to find some pain-killing drug We are more anxious to find some way to escape the discomfort of it, rather than remove its cause. These drugs, of course, may be necessary to control severe pain at times, but they should never be taken if the patient is not under the direction of a well-trained doctor

Let us not be deceived *These pain-killing drugs never cure any disease* They only cover up the real problem by temporarily removing the discomfort Meanwhile the destructive processes are going on just the same as they were before There is danger in using sedatives and narcotics, except in an emergency Because these drugs give temporary relief, the individual may no longer feel the need of expert medical care He may even imagine that he is getting better, but his apparent well-being is a fraud These pain-killing drugs often delay the day of recovery The poisons continue to pile up within the body, making the work of the kidneys and the liver doubly hard

Remember, if you want to get well and stay well, don't depend upon pain-killing drugs

Nature's Seven Remedies

Then how shall we find health and happiness? Aren't there any natural remedies available by which we can preserve our health? Yes, there are One famous writer some years ago outlined seven of Nature's remedies for us in these words She said· "Pure air, sunlight, rest, exercise, proper diet, the

use of water, and trust in divine power, these are the true remedies."

What a simple, sensible way to health! And what is more remarkable, there is no great expense involved. They are free to all. If we are wise we will make use of every one of them They will help us to get the best out of life Let us consider these natural remedies briefly

The first is *pure air*

Can anyone doubt that this is essential to health? Every cell in the body needs oxygen We must have oxygen if we are to survive Many people are weak and sickly because they are breathing contaminated fumes from manufacturing plants, and from crowded city streets Others are sick because they fail to ventilate their homes properly, and still others contaminate the air they breathe by inhal-

ing nicotine and other poisons If we want to be healthy we must breathe plenty of pure air This is the first step toward good health

The second is *sunlight.*

This too, is most important to our well-being. Without the healing, life-giving rays of the sun, nothing can live Sunlight purifies the air that we breathe. It keeps the rain and mist in constant circulation, and these in turn wash and purify the atmosphere Sunlight is the most powerful killer of harmful germs Plants need sunlight to activate the green substance called chlorophyll which is so abundant in their leaves Chlorophyll cannot work without sunlight Each leaf is a tiny factory in itself. It produces the proteins, carbohydrates, and vitamins, that are necessary to sustain the plant itself And the plants in turn provide the

food for the whole animal kingdom, including man Without sunlight this whole cycle would be impossible It is those healing rays of the sun that give us life

Nature's third wonderful remedy is *rest.*

Nothing is more essential to the tired body and troubled mind than rest When we are overtaken by some acute illness, Nature makes us lie down and rest The more active we are, the more we need rest. Children grow faster when they get plenty of sleep Complete relaxation is very important to every one of us Your whole body needs rest every day Some parts of your body take their rest without letting you know anything about it For instance, your heart may work for seventy years or more, but even so it spends half of this time at rest It is true that the heart's resting period lasts only for a fraction of a second between each beat, but during that time it is really relaxed If it didn't rest between each beat, it would soon stop altogether That's why we become so weak and tired when the heart is palpitating or beating too rapidly And so it is with the

muscles, the bones, the joints, the digestive organs, the nerves and all the rest of the body Every part of us must have rest if we are to survive the strain of daily living. Unfortunately too many of us are trying to get along without enough rest. That's one reason why so many of us are tired and sick.

Now the fourth step toward good health is *exercise,* and this is just as necessary as rest.

But many of us are getting so lazy these days If there is a chance to ride instead of walking, we will choose to ride, even if it is only around the corner or up to the next floor of some building But you know that this is not the way to health We should give those long muscles in our legs and backs a chance to develop Walking and deep breathing are excellent builders of health.

You know, children are often wiser than older folk. After a meal they will always run around if they are given half a chance. But as we grow older we tend to get fat and lazy. We eat heartily, and then we fail to take enough exercise This prepares the way for the degenerative diseases, such as hardening of the arteries, which carries off so many people in middle life. If we want to stay well and preserve our youthful vitality, we should get out and put those creaky joints of ours to work every day. There is life and health and joy out in the fresh air, and the mind is far more efficient when the muscles are kept healthy by good, wholesome exercise

Nature's fifth great remedy is a *sensible diet.*

Strange as it may seem, there is far more mal-nutrition today even among the wealthy classes than most of us realize Many people who look fat and well are actually suffering from diet deficiency, in spite of looking well fed Some people are so foolish in what they choose to eat They spend their hard earned wages on such devitalized foods as polished rice, white flour, and refined sugar It's true that these are quick sources of energy, but they tend to poison the system, leaving the body a prey to disease If we are wise we will eat the foods that will protect us and keep us in health Such foods will give us stamina and will keep us from wearing out as we reach middle life

Nature's sixth remedy is *water*

Nothing is more wonderful for health than water It fills all our bodily needs and provides healing for broken-down tissues Water is essential for every cell in the body It is the one perfect cleansing medium, both for the outside and for the inside of the body Water is very useful in relieving pain and fever, and it can be used effectively in treating many nervous conditions You see, over seventy-five per cent of the human body is composed of water That is why we should drink plenty of water to keep ourselves in health Modern medical science confirms the fact that water and not whiskey is the finest drink for man

And finally, we come to the seventh step—*trust in divine power*

This is the most important of all Health and healing come only from God Doctors and nurses may do much to help us, but even they are not able to restore us to health All that they can do is help Nature by removing the hindrances to our recovery. To get well and to stay well, we must have faith Nature will take care of the healing process when the patient's will is on the side of recovery We must put our

trust in divine power Every person who is sick should be under the care of a competent and well-trained physician—one who knows the best methods, and uses the best medicines At the same time the patient should do all he can to help himself to get well and to stay well The best way to do this is to make use of these seven natural ways to health

Let us repeat them once more They are pure air, sunlight, rest, exercise, a sensible diet, plenty of pure water, and above all, trust in divine power These are nature's seven wonderful yet simple ways by which every one of us can find lasting health and happiness

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"Five duties line each mortal path
That leads to life's far border:
To love, to learn, to serve, to earn,
To set one's house in order."

* * *

"Two men looked out through the selfsame bars: one saw the mud, and the other the stars."

HANDLING A CONTAGIOUS DISEASE

(Continued from p 9)

infected surroundings safe for others?

Perhaps you wonder how the time to end the days of seclusion is determined As soon as the little one puts forth no more germs that can infect others, *he is ready for release. But how do we know when he is no longer able to give the disease to others? In some diseases* this state of being no longer infectious is determined by laboratory tests, throat cultures are taken in diphtheria, and the stool is examined in typhoid fever and dysentery, but for some diseases there are no satisfactory laboratory tests, and for each of these an arbitrary time is set, which experience has proved to be beyond the period in which the disease can be transmitted Your doctor, who has so faithfully cared for your child, does not say when the quarantine is to be lifted, that is up to the health officer It is he who has the authority to impose or to continue quarantine until he is sure that the patient can no longer transmit the disease to others Co-operate with him, and make his work as easy as possible

How to Make the Sickroom Safe Again

How does one clean up after a contagious disease? First attention will naturally turn to the patient in the sickroom The cleaning-up ordeal for the little patient consists of a warm bath with soap and water and a good head shampoo The clothes he puts on have been kept outside the sickroom and have in no way come in contact with any of the infected surroundings These are put on outside the sickroom It is hardly necessary to say that he should not be put back into his room until it is cleaned up

Now, how is the room to be cleaned? Everything that can be burned, as cloths, tissue paper, and toys, are taken to the fire The linen, dishes, and everything that can be boiled and washed in soapsuds are subjected to that process Blankets and clothing that will not tolerate boiling are washed in warm soap-suds and hung out of doors The furniture, doors, and

windows are washed and polished in the same way that constitutes a thorough spring cleaning Special attention is given to door-knobs and places where discharges from the patient may have been carried The mattress, which has been covered with a rubber sheet or oil-cloth, is aired in the sunshine for two days, one day for each side It may be well to scrub over its surface with a brush and soapy water to be sure to remove dirt and discharges, and rinse with clean warm water When the cleaning is done, open all the doors and windows, and let the room air for twenty-four to thirty-six hours, it should then be safe for occupancy —*Children's Common Contagious Diseases*

KIDDIES' KORNER

JERRY LEARNS THE HARD WAY

EILEN E MORRISON

JERRY was not really a bad boy. It was just that sometimes, if he wanted to do something very much and had been told not to, he went on and did it anyway when he thought no one was watching.

Like going to the river alone, for instance. Mother and Daddy had often warned him never to go swimming alone. So he usually went with Daddy or with some of his friends.

But this morning there was no one to go with him. None of his friends were at home. He had asked Daddy, but the answer was, "I'm sorry, son, but not this morning. I want to paint the garage today."

Any other time Jerry would have asked Daddy to let him help with the painting. But this morning was warm and sunny, and he had his heart set on going swimming. He sat down on the front step with his little dog, Chipper, beside him.

He reached down to scratch Chipper's ear. "You know, Chipper, I'm tempted to go to the river anyway. I can swim all right, and nothing's going to happen to me."

Chipper looked up and wagged his tail as if he understood.

"You want to go too, don't you?" Jerry asked. Chipper jumped down from the step and barked joyously.

Jerry looked around the house. Daddy was in the garage stirring a tin of paint. Mother was still in the kitchen. "Nobody's watching," Jerry said to Chipper. "Come on, let's go!"

Together the boy and his dog went around the other side of the house and on across the pasture. The river ran through the woods at the end of the pasture. Soon they were there, and Jerry was splashing about in the water.

There had been a lot of rain during the past few days. Jerry noticed that the river was swollen higher than usual and that the current was stronger. Yet the sight of Chipper bounding happily along the river bank made him forget to be afraid.

Jerry decided to swim to the other side of the river, the way he and his friends often did when they were together. He struck out across the stream. At first he did not have any trouble. When he reached the middle of the river, however, the current became so strong that he had to fight against it. He was swimming as hard as he could, but could make no headway against the swift, cold water.

Slowly the current began sweeping him downstream. The other bank still seemed far away, and Jerry was getting tired. He would never be able to make it all the way across. And even the bank he had started from seemed far away now. Suddenly he became very frightened, and began swimming with short, choppy strokes, which wasted his strength.

Jerry's only hope now seemed to be in catching on to something to save himself from being swept completely away by the river current. Downstream a tree branch reached out like a long arm to dip into the water. If only he could get close enough to catch it as the river carried him by!

The tree grew on the other bank, and Jerry struggled to swim a little farther across as he neared the branch. It was right in his path as the river swept him closer. As it came to him, he reached up and grabbed with both hands. He had it! The current tried to tear him away, and the branch pulled down with his weight, but he held on.

For the first time Jerry thought of Chipper. The dog had realized something was wrong, and was now dashing back and forth along the bank Jerry had started from. Chipper stopped again and again as if he would jump in and come to Jerry.

"No, no Chipper!" Jerry screamed above the roar of the river. The dog paused at the spot where he had been ready to leap in. He looked across the water at his young master.

"Go, get Daddy!" Jerry called. Chipper did not move. One little ear was raised up, as if he wondered what was expected of him. Jerry's heart sank. He had to make Chipper understand! "Go, get Daddy!" he called again.

Chipper stood wagging his tail furiously. Then he turned suddenly and bolted through the trees in the direction of home.

Jerry clung tightly to the sagging branch. He was shivering now, and getting colder every minute. The angry river tugged at him constantly. If only he could hold on long enough! If only Chipper could make Daddy come! He looked fearfully up at the branch, hoping it would not crack under his added weight.

Every moment seemed an hour to Jerry. What if Chipper had not understood, after all, and was playing somewhere on the way home? He was afraid to think of that.

Then he heard a welcome shout. "Jerry! Where are you?" his father called.

"Here I am!" Jerry shouted as loudly as he could.

Daddy, with Chipper at his heels, came through the trees at the river bank and looked out over

the water. He had a long rope in his hand.

"Here, Daddy!" Jerry cried He was so weak now he felt as if he would let go at any moment.

Then his father saw him. "Hold on, Jerry!" he shouted. "I'll throw the rope to you"

Daddy quickly tied one end of the rope to a tree Then he poised on the bank and threw the rest of the rope toward his son It fell short and floated past Jerry Daddy pulled the rope in quickly and threw again. This time it went almost across the river, and the current carried it swiftly down to where Jerry clung to the tree branch Before it could pass him, Jerry grabbed it with one hand

"Hold tight!" his father shouted Jerry flipped the rope till it was around his wrist before he let go with the other hand Then he let go and quickly grasped the rope with his second hand as the current swept him downstream Then the rope tightened with a jerk, and he felt himself being pulled toward the shore Soon he was close enough to catch the hand Daddy reached out to him.

"Thanks, Dad," Jerry chattered, trying to stop shivering

"That was a close call, son," his father said "Here, take my coat and put it around you."

Jerry was thankful for the warm coat And he remembered to give faithful little Chipper a loving hug Then he and Daddy started home, with Chipper romping ahead Daddy had not said a word about why Jerry had come to the river alone

Jerry reached up timidly to put his hand through his father's arm "I'm sorry, Dad," he said

"That's all right, son," said Daddy, looking down at him with a smile and patting his hand

And it really was all right They both knew that Jerry had learned a lesson the hard way. He would not disobey again, even when he thought no one was watching.

HOMEMAKERS' HELPS

RECIPES

Split-Pea Soup

One cup split peas; 1 finely cut onion; 1/3 cup butter; salt to taste; 1½ tablespoonfuls tapioca.

Boil peas in 1 quart water until nearly tender Add more water if necessary Add onion, butter, salt, and tapioca Cook a little longer, with frequent stirring Put through colander and serve Serves four

Vitamin Soup

Half a cup cabbage; ½ cup carrots; 1 cup potatoes; ½ cup string beans; 1 small sweet potato; 1 small onion; 1 stalk celery with leaves; 1 tablespoonful oil; 1 tablespoonful butter; ½ cup tomatoes; salt to taste; 1 teaspoonful Vegex or Marmite.

Wash vegetables with a brush Do not peel Cut them up, cover with cold water, add fat, and cook until tender Add tomatoes and salt Cook 20 minutes longer Press through a coarse colander Add the Vegex and enough water to make the right consistency Re-heat and serve Half a cup barley cooked in a double boiler may be added just before serving, or cooked natural rice may be used About four servings

Khecheri

Two cups rice; 2 cups red dhal, ½ lb. peas; 10 small potatoes; 8 small onions; 2 medium onions; 1 teaspoonful turmeric; ½ teaspoonful masala; ½ teaspooful cumin seed; 4 small cardamoms; 3 cloves; ½ teaspoonful sugar; salt to taste; 3 tablespoonfuls ghee.

Soak dal and rice separately Shell peas. Slice medium onions. Brown a portion of sliced onions in hot ghee, drain and keep aside Brown remaining sliced onions, dal, sugar and masala (except turmeric) in some ghee Add rice and vegetables kept whole Fry till rice begins to stick Cover with water standing 1" above rice level. Cook on very low fire till tender and moisture is absorbed Garnish with browned onions.

Stuffed Marrow

One medium vegetable marrow; 3 cups cooked stuffing (like left-overs); ghee.

Peel, cut top of marrow and scoop out inside Fill with stuffing Cover with top and secure by sticking skewers. Heat ghee and pot-roast till tender

Note The stuffing may be anything savoury and suitably seasoned

Wheatmeal Cream Puffs

Half pint water; 2 ozs. vegetable butter; 1 cup (4 ozs.) wheatmeal flour; 3 eggs; ¼ teaspoonful salt; whipped cream to fill.

Boil water and butter, add flour in a lump, beat until leaves sides of pot Stand to cool Beat in the eggs one at a time to a smooth paste Add salt Drop from tablespoon on cold greased tray Bake in hot oven (450° F) 25 minutes Reduce heat for 15 minutes longer Makes 24 puffs

Date Dainties

Two ozs. vegetable butter; 2 ozs. sugar; 1 egg; 6 ozs. white flour; 6 halves dried apricots; 2 ozs. dates; 1/3 cup (4 ozs.) honey; 1 oz. lemon juice; ½ cup (1¼ ozs.) desiccated cocoanut; 1 extra egg white.

Cream butter and sugar, add well-beaten egg and flour Roll out, cut into rounds, line 20 small patty tins, flute edges. Snip apricots and dates

into tiny bits with scissors Add honey, juice, coconut, fold in stiffly beaten egg white Fill cakes bake in hot oven (475° F.) 1[illegible] minutes Makes twenty

Lemon Squash

Four lemons, 6 ozs sugar, ½ oz. citric acid, 1 quart cold water.

Wash lemons well dry, pare very thinly, so that only the yellow part comes off Squeeze and strain the juice Put the rind and juice into a jug add the sugar, citric acid and water Allow to stand for four hours on ice and serve

Grape Punch

One pound sugar, ½ pint water, juice of 6 lemons, 1 quart grape juice

Boil sugar and water together until it spins to a thread take from the fire When cool, add lemon juice and grape juice Stand for 1 night and serve with water and ice

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HIGH BLOOD PRESSURE

(Continued from p 13)

and masticated thoroughly Meat should be avoided, and eggs used only two or three times a week if at all Coffee and tea should be left alone, as they increase acidity and overstimulate the nerves, besides diminishing digestive powers The general rules of correct diet should be carefully followed, including avoidance of fried food, condiments, and spices, substitution of lemon juice for vinegar, and avoidance of mixing acid fruits and coarse vegetables at the same meal Indigestion with resulting gas formation, tends to make the pressure go up in any person suffering from the disease

Since cholesterol seems to play a part in hardening of the arteries, it is well to avoid cholesterol foods largely This would mean the substitution of vegetable oils for animal oils and fats, as far as possible The writer has seen and knows many persons who, though suffering from high pressure, have lived well beyond their expectancy, largely because of exercising great abstemiousness in diet, observing correct mental hygiene, and taking moderate physical and mental exercise

A warm bath taken just before retiring at night has a tendency to relax one and favour sound sleep, and should be used in preference to drugs

Exercise should not be wholly discarded because of its marked benefits to one's general health and especially the nerves Six hundred and eighty-two muscles need to be kept in a state of normal tone, and few patients there are who cannot safely walk and take other light exercises, preferably regulated under the advice of a physician Exercise, by producing normal fatigue, acts as a safety valve to the nervous system and aids in securing refreshing sleep

If we had not within a generation moved from the village into the city, substituting riding for walking, nerve strain for muscle exercise, and bright lights for daylight, we would see much less high blood pressure Since we cannot, if we wish, entirely change our environment and return to the olden days, although they are not without their advantages, we must somehow offset the stresses and strains of our modern days We must increase the strength of, and decrease the strain on, our human organism We must never forget that man is a very complex creature His body, mind, and spirit require such attention and care that each part shall function normally

Diet for High Blood Pressure

A diet that is very high in meat will *tend to* produce a rise in blood pressure A diet high in protein and one that is acid forming may produce high blood pressure, and the two are combined in meat. If the blood pressure gets too high, it often results in the bursting of a blood vessel, with resulting paralysis, or stroke

The diet should contain just a minimum amount of protein, and it should be highly alkaline Fruits and vegetables should be used freely

The following diet list gives suggestions which will aid in lowering blood pressure

Fruits

Pomelo, Grapes, Oranges, Avocados, Lemons, Apricots, Grapefruit, Bananas (well ripened), Apples, Melons, Peaches, Figs, Pears, Dates, Pineapple, Raisins, Cherries

Vegetables

Lettuce, Peas, Celery, Carrots, Tomatoes, String Beans, Sweet Corn (moderately), Green Lima Beans, Spinach

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HOW TO HAVE A HEALTHY CHILD

(Continued from p 17)

We may wisely guide our families to *beneficial rest and relaxation* The principle of rest, essential to survival, is illustrated in the "ever-working" heart muscle, which has a momentary rest period between each contraction.

Fatigue is physical, related to muscle tiredness, or it is psychological A feeling of fatigue may be brought on by boredom or put off by intense interest Battles are lost because armies are harrassed and denied rest and sleep Patients have regained good health from prolonged rest

There are many tired children of all ages Tiredness is a principal cause of poor posture Home and school programmes should be examined. Is there too much extra-

curricular activity (sports, music lessons)? too much homework? too much employment (part-time jobs for teen-agers)?

Rest or play between activities or simply change in activities makes for greater efficiency Tired from a day of housework with the children under-foot, mother may be rested by an evening playing the piano or sewing Exhausted from the day's work, father may be refreshed by work in the yard or by a set of tennis Junior needs active play after a day in school, but after a full day of outside exercise, he needs quiet games or listening to fine music for a profitable change

Parents must make provision for vigorous play for children Running, jumping, skipping, throwing, kicking, striking, and supporting the body weight are all necessary manœuvres stimulating the growth process and giving the child opportunity to acquire necessary co-ordination. Plans for quiet activities are also essential

Let us notice *how emotional states may affect growth* Consider the device of Dr Norman Wetzel, child specialist, for precision measurements of physical fitness in children, and the application of his ideas by Dr Griffith Binning, Canadian school physician

Dr Wetzel has devised a chart for tracing the child's development up to eighteen years On this chart the child chooses his "physique channel" (short and squatty or tall and thin) The child's development schedule is set by himself and compared with himself, instead of with other children Deviations by the child from his chosen path are readily noticeable on the graph-like chart, and should be explained

Spurts from the chosen growth channel, either toward fatter or thinner, were found by Dr Binning and others to be very frequently related to emotional crises In fact, actual disease may have caused no growth disturbance if the child's emotional state has remained serene Amazingly, it was concluded in a study of eight hundred school children that a major enemy of growth progress is the "anxieties of life improperly handled"

Events in a child's environment that caused physical or emotional separation from one or both parents, leaving an emotional void in the child's life, caused as much growth disturbance as did disease A parent may not have had to go into the service of his country, nor been divorced, nor died He may be "absent" only because of too

many "important" business or social obligations

The child's emotional maturity may very likely mirror his parents', who have striven by practice and conscious effort to make their lives secure. The child with an average chance for good nutrition and freedom from disease who reflects from his parents a generous degree of unselfishness, dependability, tolerance, adaptability, courage, and related virtues will probably continue normal total growth no matter what shocking events overtake him.

What more solemn parental challenge could there be!

THE DOCTOR SAYS

1. This question and answer service is free only to regular subscribers.

2. No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual case.

3. All questions must be addressed to The Doctor Says. Correspondence personally with the doctor is not available through this service.

4. Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES. Answers cannot be expected under ONE MONTH.

5. Questions sent in on Post Cards will not receive attention.

6. Make questions short and to the point. Type them or write them very clearly.

7. Questions and answers will be published only if they are of such a nature as to be of general interest and without objection, but no names will be published. Address "The Doctor Says," Oriental Watchman and Herald of Health, P. O. Box 35, Poona 1.

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ARTHRITIS Ques.—"My husband has arthritis. There are ugly sores in various parts of his body, and he is anæmic. Is there such a thing as an arthritic sore?"

Ans.—We do not know of an ulcer that is identified as characteristic of arthritis. In advanced or severe cases of arthritis sores are common because of accompanying anæmia, loss of flesh and pressure. In sitting or lying, the body weight bears heavily upon certain bony prominences. The result is an injury to the tissues and breaking down of the overlying skin. Healing in these cases is slow because of the poor nutritional state of the skin and tissues. It is important that arthritic patients be well fed, especially with foods that build up the blood.

In treating these sores, use the utmost care in handling the moisture, for it is possible that the fluid from one sore may be transmitted to the skin elsewhere and be the cause of a new breakdown or festering of the skin. Use disinfectants freely but carefully. Alcohol or astringent powders help keep the surrounding skin tough. Do not let the patient rest in any position for a long time. Change positions frequently.

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SWOLLEN GLANDS Ques.—"What causes swollen neck glands in a young girl?"

Ans.—The swelling of glands in the neck of a young girl indicates infection somewhere in the area drained by these glands. It may come from infected tonsils, decayed teeth, or some diseased condition of the glands in which the structure of the glands is involved. They should be closely watched by a physician.

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PINWORMS Ques.—"My eight-and-half-year old has been bothered several years with pinworms. When she is bothered with them she is very nervous. After treatment she is altogether different. Is there no permanent cure? What treatment is usually used?"

Ans.—Getting rid of pinworms is often a problem, but it can be solved if the situation is really understood.

Pinworms are common. They may cause no symptoms or only slight symptoms. The more nervous a child is the more severe the itching and discomfort. Many have pinworms and do not realize it. The eggs are not usually found in the stools, for the worms come out only in the night. A diagnosis of pinworms may be difficult to make if a person infected does not have symptoms.

One person in a family having pinworms exposes all other members to them. It has been found that the surest way to get entirely rid of pinworms is to treat all members of the family at the same time, whether or not there is evidence that the others are infected.

The treatment should be continued for twenty-three days. This twenty-three-day treatment allows for all the pinworm eggs about the house to die. The furniture, rugs, and other equipment may have these eggs in them. As they mature, the family is re-infected and the trouble begins again. If there is a recurrence, it will be simply a matter of repeating the treatment.

Children especially are likely to re-infect themselves with these eggs. There has been an apparent cure, then after three or four weeks there is a recurrence, when the eggs hatch. Small as they are the worms take as long as four weeks to mature; hence, a quiescent period doesn't necessarily mean a cure.

Your doctor has probably told you to get gentian violet tablets 3/20 of a grain in size and give your child seven to nine daily, perhaps three tablets three times a day, before meals. The dose varies with the size of the child. This should be kept up for eight days, stopped for a week, and repeated for another eight days. This makes the twenty-three days.

The other members, including you, must be having the same treatment. You will need more, of course, because you are larger. Younger members will take fewer tablets. You should be under your doctor's care during this time. He will tell you the correct doses for each one.

It is a nuisance, of course, but not very serious except in affecting patience and nerves, especially in the children. During the treatment all sheets will be purple stained. The tablets should not be crushed since they stain vividly.

Harm can be done to a child's nervous system if he is made anxious and frightened about it. Don't act as if it were a serious matter, for it really isn't if dealt with correctly.

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BELCHING FOOD Ques.—"What causes a person to belch up a large amount of food after eating?"

Ans.—The belching you refer to with regurgitation of food may be on a nervous basis. However, if the person is in middle or advanced life we would think of an ulcer or some irritated condition about the outlet of the stomach that produces the symptoms of heartburn and causes a backward movement of some of the contracting muscles, so that food is regurgitated into the gullet. Unless

this is a long-standing symptom, we believe you should see a physician and have a careful examination. A pouch or pocket from the side of the œsophagus may empty itself with a belching action.

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AMOBIASIS: Ques.—"My twenty-three-year-old brother-in-law has had dysentery Though it is cured now he is very weak. On examination of the stools the doctor says that the damage due to dysentery has not been healed properly for there is much mucus and that there is infectious entero-colitis. He has been taking formo-cibazol tablets. What is your advice?"

Ans—Your brother-in-law may still be suffering from Amobiasis or he may have Mucous Colitis, both of which are difficult to treat. One of the most effective treatments for Amobiasis is the use of Viasept 50 mg three times a day along with Chloroquine one tablet three times a day for three days, then one tablet daily for 16 days These medications should be used under the direction of a qualified physician If formo-cibazol tablets are not effective, one of the anti-biotics such as Terramycin 250 mg every six hours should help This too should be given under the control of a physician.

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DIABETES MELLITUS Ques—"I am forty-four and a diabetic I take insulin injections daily and I am also a non-vegetarian I drink alcohol usually What should be my diet?"

Ans—It would not be wise for us to outline a diet for you unless you were under our medical supervision. This should be done by your own physician, who is responsible for your insulin programme

Diabetes Mellitus is due to too low a production of the hormone insulin of the pancreas gland. Insulin is necessary in the oxidation and neutralization of sugars by the body. If the pancreas is not functioning properly, diabetes may be controlled, if mild, by restricting the intake of carbohydrates such as sugars and starches If this is not sufficient to control diabetes, insulin must be given by needle Whereas diabetes used to kill, it can now be completely controlled in most cases by the above programme.

I wonder if you are much overweight, as diabetes frequently is associated with obesity. Bringing weight down to normal by careful dieting has actually brought diabetes under control in many patients

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CALCIFIED LUMP IN CÆCUM AND AVAILABILITY OF "PRIVINE". Ques—"I underwent an operation in December last year, for a calcified lump of some kind in the cæcum By April the gut had not healed I underwent another operation on the 26th of April, but there is still a slight fæces discharge My doctor advises a third operation I would like to know if I can be treated medically instead. Also, my doctor is willing to call in another surgeon for second opinion. Would any of your surgeons come here on my case if our Company doctor asked him for consultation? Or could you recommend any other abdominal specialist or first class surgeon who would be willing to come? Also could you let me know where I could obtain "Privine" for sinus treatment?"

Ans.—Of course without examining you, it is quite impossible for us to make recommendations or suggestions. I do wish that it could be possible for one of our surgeons to join in consultation on your case. I do not know of any at present, who could make the trip. But I am sure that there are qualified surgeons, who could give valuable advice regarding your case, who are available near you.

Privine is manufactured by Ciba and can be obtained in most well stocked pharmacies in India If you cannot find it stocked in a pharmacy, you may write direct to Ciba Pharmacy Limited, Post Box 1123, Bombay

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(1) SWOLLEN HAND; (2) PREMATURE GREY HAIR; (3) AMŒBIC DYSENTERY, (4) DIRT IN CORNERS OF EYES Ques—"(1) My mother who is about fifty years of age, fell down on the dorsal surface of her left hand some two years back After this time her hand got swollen and painful, especially at the joints She has shown it to many doctors At present it is much less swollen, there is no pain at all but she cannot close her fist properly

(Continued on p 30)

SUPPLE BACK AND LIMBS

(Continued from p 15)

results You must either stand with the soles of feet on a book or door-step so as to increase the muscles' latitude of action, or use but one foot at a time to increase the weight strain Frankly I doubt that calf development is worth the work; a brisk daily walk will keep the limbs in healthy condition, while at the same time effecting other much more desirable physical improvements.

The best condensed, time-saving exercises for the legs is rope-skipping and, like correct walking, it gives general results that are far more valuable than mere leg muscle. The feet themselves are

splendidly exercised in rope-skipping and strength in the ankles and arches is worth a great deal more practically than bulging calves

A LITTLE POISON

(Continued from p 11)

Spurious Basis for Happiness

Dr William I Salter, Professor of Pharmacology, Yale University School of Medicine, says "The chief problem is the possible chronic effect on the central nervous system, increased irritability, loss of sleep, palpitation of the heart and even muscular tremors Such effects are due to chronic mild intoxication with caffeine Tea contains over twice as much caffeine as coffee, but as it is ordinarily brewed there is approximately the same amount of caffeine present in the ordinary cup of tea as in a cup of coffee, i e, 150 mg (one therapeutic dose) In both cases, the nervous effects are due primarily to caffeine Certain widely used soft drinks also contain as much caffeine as ordinary coffee"

"I'd like to quit, Doctor, but my, it will be impossible without some help," you say Now that's just the answer we want Place your will power on God's side, for I am certain that He doesn't wish any of us to be victims of unhealthful habits, and He will help you

We have some beverages to help tide you over

Since your nerves are going to have a real jolt getting rid of this drug, you will need all the Vitamin B you can get I would suggest three cups or more of Yex or Marmite broth a day, which tastes something like bullion and gives you lots of Vitamin B

Take a hot bath daily, drink plenty of water, eat large quantities of fruit, and keep at it for ten days, and by then you will have rid yourself of a bad habit and made one more step toward the best of health

RABIES CAN BE PREVENTED

(Continued from p 7)

way Finally, as paralysis sets in, he drops in his tracks and dies The process from beginning to end takes about five days

The second variety, dumb rabies, is seldom recognized except by a veterinarian There is no excitement or attempt to bite The dog becomes obviously ill and anxious, but is not irritable On the second day, paralysis of muscles sets in, usually in the lower jaw, so that the animal cannot swallow It is then that sympathetic persons often try to dislodge a bone they think may be caught in the dog's throat In so doing they cover their hands with infected saliva In the presence of a break in the skin it will infect the person, who may die if he is not treated Death occurs in three days

Man's reaction to rabies is similar to a dog's The person infected with the excited type behaves much as his canine counterpart, the outstanding symptom being the spasm of throat muscles, which prevents the victim from swallowing In time the mere mention of food or water will result in convulsions

The struggles in rabies are much like the convulsions of strychnine poisoning Even a slight breeze passing over the victim in the last stages of the disease causes convulsions that soon lead to death The course of the disease in man is three to five days after the beginning of symptoms

Actually the danger of rabies is principally in misunderstanding and lack of care on the part of the victim If treatment is indicated and given, less than 1 per cent of the victims will develop rabies After treatment, there is immunity for about a year

It should be remembered, however, that even controlled treatment is not without risk Your doctor will never give you the Pasteur treatment unless he considers it necessary to save your life

Rabies can be prevented. Great Britain and Scandinavia solved the rabies problem by destroying unowned dogs and requiring the muzzling of other animals when they are out of their yards. This involves a great deal of work and care by dog owners, but it eliminates rabies from these countries

Within recent years an immunizing shot for dogs was developed, and it has shown excellent signs of success in eradicating the disease

If you or a member of your family is bitten by an animal, your chances of developing rabies are practically nil if you do the following

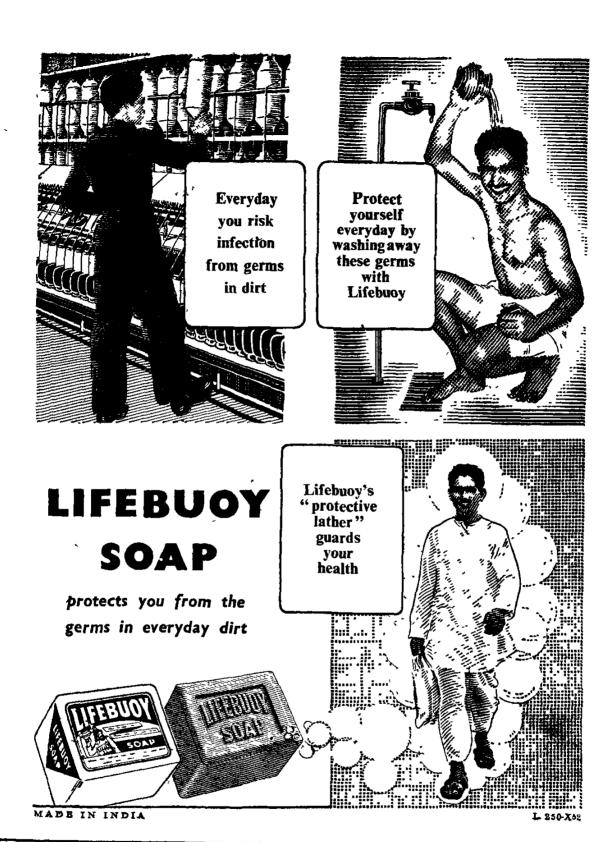
1 *Catch and identify the animal immediately* Under no circumstances should the animal be killed. Since the incubation period of rabies in the human is long, taking from two to twelve months to develop depending on the site of the bite, observation of the dog will eliminate taking the treatment unless the dog is rabid

Dog saliva is infectious for only three to six days before the dog develops symptoms (thus demonstrating that the disease has reached its brain), so we can presume if the animal does not have the disease within two weeks that it is not rabid, and treatment will not be needed for the victim. When there is any doubt, further observation and tests may be carried out, at the direction of the public health department.

2 *Encourage bleeding* Bleeding tends to wash the virus out of the deep parts of the wound

3 *Use large quantities of soap and water to wash the wound.* Careful cleansing of the wound within five hours of exposure will lower the death rate by half

4 *Take the patient to the family doctor* Your physician will ex-

amine and treat the wound It is his responsibility to initiate Pasteur treatment when it is necessary Ordinarily this is not given unless the dog has been destroyed, has escaped, or is known to be rabid.

If your doctor does suggest the treatment, remember that the small amount of risk involved in taking the course of injections is offset by the fact that for persons who receive the treatment rabies occurs in less than 1 per cent as contrasted to the death rate of more than 15 per cent in persons who do not receive the treatment

5 *Don't become unduly alarmed* Remember, if inoculation of dogs is compulsory in your community, rabies will be almost extinct.

Remember also that because a dog is excited or frothing at the mouth after running in hot weather he is not necessarily ill or rabid. The signs of rabies are quite distinct, and should not be confused with the appearance of a normal, warm, excited dog

6 *Remember rabies can be prevented* When adequate precautions are taken, death from rabies is actually quite rare

DOCTOR SAYS

(Continued from p 27)

The metacarpo-phalangeal joints of the four fingers seem to be quite stiffened and she cannot flex them at all Can you give us some advice? (2) I am twenty one years old and I have got quite a number of grey hairs My general health is fairly good Can you give me some advice or tell me about its remedy if there is any? Is Hennol any good? (3) I had amœbic dysentery in the beginning of the year I had Emetine ½ gr, B D for 8 days The stools were negative for amœba after this I have no pain in my abdomen, but my stools are very offensive What is the reason for it? Sometimes they are not well formed Frequency is normal (4) Lot of dirt (white) collects in the medical corners of my eyes Why is it so? My eye-sight is normal."

Ans—(1) Alternate hot and cold treatments to the hand should build up the circulation of the blood, stimulate the nerve supply and tone up the muscles of your mother's hand This treatment can be given as follows:

Choose two metal buckets or some other form of container large enough so that the hand and wrist can be immersed. Fill one with water as hot as can be borne without burning Fill the other with ice water containing chunks of ice Place the hand in hot water for three minutes and in cold for one minute Repeat this five times in succession while adding more hot water and being sure that ice is in the cold water. Treatment administered once or twice a day should be of considerable benefit (2) There is no known injection, tablet or treatment of any kind except dyeing the hair that will get rid of your grey hair. Some folk grey prematurely, but this does not mean that they are becoming old. (3) The offensiveness of your stools cannot be fully determined without doing certain examinations of the stool Probably the presence of a certain type of bacteria is responsible By taking nothing but curd for a few days you might change the bacterial flora of the intestinal tract and thus alter the odour (4) The material collecting in the corners of your eyes suggests the presence of a low grade infection I would advise consulting a reputable physician, who could prescribe a harmless anti-septic which should eliminate this difficulty.

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NERVOUS SHOCK Ques—"My wife went to Kumbh Mela on the third of February Due to a lot of rush at the station platform and the sight of a terrible accident, she got a shock. Trembling of body, sinking of heart, palpitation, and headache started Doctors called it Anxiety Neurosis Despite a number of treatments there is a relapse nearly every sixth or seventh day The doctor suggests that I keep her mind occupied with other interesting things but I have not been successful Then I started Homœopathic treatment Everything seems to have disappeared except for an occasional shock in the body once or twice a day and the heart palpitation I am sending her to Gulmarg for the change in climate My wife is 24 and has not complained of any illness before this There is nothing wrong with her urine, blood, stools, or rest She was given Bromides, Bromoline, Vitamin B complex, proteins of various types and other medicines"

Ans—Your wife has indeed had a most unfortunate experience while going to Kumbh Mela. Rest among the beautiful surroundings of Gulmarg with a good balanced diet is fine treatment for her condition Some hydro therapy treatment which she could receive at Simla Sanitarium and Hospital for a period of a few weeks, should also be of decided benefit to her If the condition does not improve you should consider taking her to a good psychiatrist in Delhi who can administer electro-shock therapy Her complaint should be greatly benefited by these treatments However, I would try rest and hydro-therapy treatments first

I would not advise the use of Bromides under any circumstances. If she needs a sedative, Phenobarbitone in small dosage should be sufficient and is not dangerous like the Bromides.

TWO NATURES

(Continued from p. 32)

between Christ and Satan Christ's allies are good, clean literature, clean associates that obey God, church attendance, and the Word of God. Satan's allies are corrupt, obscene, bad literature, wicked associates, love for the world, unwholesome entertainment, evil pleasures.

Satan is a defeated foe. Thank God! We can come off more than conquerors with Christ. When Christ upon the cross cried, "It is finished," Satan was defeated; and by accepting Christ's sacrifice, man escapes from Satan and is saved by Christ Oh, to appreciate the power, the ammunition, which Heaven has supplied!

Hear Jesus say, "Without Me ye can do nothing" John 15 5. How assuring are these words. "I can do all things through Christ which strengtheneth me" Philippians 4 13 There is strength in Christ. He will fight the battle for all who accept Him, having come from heaven to our world to defeat Satan

"In the world ye shall have tribulation but be of good cheer, I have overcome the world" John 16 33 Fight the good fight of faith and lay hold of eternal life. Yes, the Christ nature will win, yet there will be struggles Day by day the Satan nature must be subdued

The moment one accepts Christ as Saviour, he joins the army of Christ Christ is the general He has never lost a battle Sin must disappear from God's universe Co-operate with Christ and live "A character formed according to the divine likeness is the only treasure that we can take from this world to the next" Yield to Christ, and He will crowd Satan out of the life Yield to Satan, and he will crowd out Christ.

Jesus is coming to save the righteous and make an end of Satan and wickedness Have you joined Christ's army? Have you yielded to Him? Do it today Oh, day of glorious victory!

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MEN WHO PROVED THE BIBLE TRUE

W. L. EMMERSON

THROUGH the centuries the Bible has been continually under fire from its enemies In ancient times, pagan conquerors like Antiochus Epiphanes and the Roman emperor, Diocletian, sought to destroy the Hebrew and Christian Scriptures as a part of their campaigns to subjugate the Jews and destroy the church

At the same time, pagan philosophers, like Celsus and Porphyry, attacked the Bible by speech and pen No onslaught on the Bible, however, can compare in virulence with that which developed in the latter part of the eighteenth century by the English Deists and the Encyclopedists of France and which increased in intensity all through the nineteenth as the German higher critics and the evolutionary scientists joined in the attack

All these assailants combined to declare that the Bible was not a supernatural Book, but a purely human composition which had come into being over the centuries just like the sacred writings of other religions, and suffered from the limitations of all primitive literature

Bible Pronounced Mythical and Unhistorical

The account of the beginnings of the earth and man, it was confidently asserted, was as mythical as the Babylonian creation stories from which, it was alleged, they were derived

The stories of the patriarchal age were pronounced fictitious, as also was the record of the history of Israel

In short, Old Testament history, geography and chronology were entirely out of harmony with the records of the great nations of antiquity like Egypt, Babylon, Assyria, and Persia, as known to the critics through the Greek and Roman historians and geographers, and these latter were, of course, to be believed rather than the biblical account

The New Testament fared no better, the gospels being declared entirely unhistorical, and the geographical details of Paul's missionary journeys quite frequently inaccurate, revealing the ignorance of the author of the book of Acts

In the face of this all-out attack upon the Bible the faith of multitudes was shaken and the conflict seemed likely to be fatal to the Bible and even to the church itself

There were, of course, those who, despite all the attacks, held fast to their faith that the Bible was the Word of God These faithful believers, however, were in dire perplexity in seeking to meet the accusations of untrustworthiness of the Bible's history, geography, and chronology, for the reason that the lands of the Bible had been for many centuries in the hands of the alien Moslem power and practically all reliable knowledge of them had been lost to the Western world The ancient cities and the monuments of the past had been covered up by the sands of time, and so completely forgotten that it was impossible for those who held to the authenticity of the biblical record to produce concrete facts to effectually refute the critical theories.

A Providence in Disguise

This lack, which a couple of centuries ago seemed so disastrous to the Christian church and the Bible, was actually to turn out to be one of the most wonderful modern providences of God If the ancient records of the past has remained open and exposed to the assaults of time, weather, and war, their evidences might have been utterly destroyed and the defenders of the Bible would have been without weapons as they faced their last and greatest conflict God, however, in His foreknowledge providentially covered up the record of the past in the ancient lands of the Bible and placed the sealed book in the keeping of an alien power, so that when the time should come its pages might be opened again to hurl back the last-day attackers and vindicate His holy Word

The story of the opening of this wonderful armoury of truth through the new science of biblical archæology, which is one of the most thrilling in the story of the church through the ages, we shall, in the articles which follow, try to tell

Starting from Scratch

When, with the decline of the Moslem power of Turkey, travellers and scholars found it possible to re-enter the closed lands of the Middle East, they had, as we indicated above, actually to start from scratch in their attempts to test the theories of the critics, for they had not even the map of the biblical world to guide them While the sites of a few of the more prominent Palestinian cities, like Jerusalem and Nazareth and Hebron, had never been lost, most of the 600 place names west of the Jordan were quite unknown. Across the Jordan, in the ancient lands of Moab and Edom, hardly a biblical site was identifiable, and in Egypt, Assyria, and Babylonia, the position was equally as bad So before anything could be done about verifying the biblical record, the ancient map of the Bible lands had to be reconstructed, hill by hill, valley by valley, city by city, and village by village A stupendous task indeed!

American Pioneer of Palestinian Geography

The new beginning in Palestine dates from the thirties of the last century and the pioneer in this field was

an American professor of Andover Theological Seminary in Massachusetts, by name Edward Robinson In 1838, at the age of forty two, he determined to leave his teaching post and go out to Palestine with a view to writing a much needed book upon biblical geography

Travelling in company with Eli Smith, an American missionary in Beirut, who had for years been collecting Palestinian place names from every available source, Robinson travelled from Egypt to Sinai, and then by way of Akabah to Beersheba, Hebron and Jerusalem from which centre they made an extensive tour of Southern Palestine They then continued their journey by way of Nazareth and Tiberias to Beirut, where they parted Smith returning to his missionary labours, while Robinson took ship for home

In 1841, the appearance of his book, *Biblical Researches* opened a new era in our knowledge of biblical Palestine

In 1852, the two friends made another survey this time concentrating upon Galilee, Samaria, Lebanon, and Damascus and as a result of their two journeys no fewer than 1 712 names were placed upon the map of Palestine and Syria Not all these identifications have been sustained by later research of course, but a very fine beginning was certainly made

Between Edward Robinson's two journeys a young German doctor, Titus Tobler by name, entered the field He had earlier made a pleasure trip to the Holy Land and had begun an intensive study of existing Palestine literature On reading Robinson's book, he resolved to follow up his work even more thoroughly, and in 1845 set out on his second journey After spending twenty weeks in Jerusalem he recorded his results in seven volumes, totalling 3 753 pages To him we owe the first accurate map of the maze of Jerusalem's streets and the first scientific description of its ancient sites, mercilessly divested of fantastic monkish traditions

The work of Robinson and Tobler inspired a Frenchman, Victor Guerin, to begin in 1852 the tremendous task of mapping the whole of Palestine and writing a monumental description of the land in seven volumes Before, however, he had completed his task in 1863, still another

(Continued on p 34)

TWO NATURES

A. D. BOHN

THE natural desire of the human heart is to live, to gain eternal life Eternal life is precious Man is subject to death How can he attain to eternal life?

In 1 Timothy 6 12 we find the answer "Fight the good fight of faith, lay hold on eternal life" Why the battle? Why is it necessary to fight in order to secure eternal life?

Before this world was made, there was a rebellion in heaven An angel called Lucifer, whom we now call Satan, or devil, had been exalted to a position of honour and authority next to God One day he decided to be God, to replace God, to sit on the throne of the universe Until the time this rebellion started, all heaven was in perfect harmony and there was only one nature, the God nature But now a new or second nature appeared, a nature contrary to the nature of God This new nature was sin This led to a controversy between Christ and Satan, as sin cannot exist in the presence of God

For a long time God dealt with Satan, and finally it was decided that Satan must leave heaven Revelation 12 9 states that Satan "was cast out into the earth, and his angels were cast out with him" Thus heaven was free from the nature of sin

No sooner had Satan been placed in our world than he began to lay plans to deceive Adam and Eve, hoping to bring them over to his side Thus he hoped to control this world, and someday the universe Eve responded to the deception and was led to eat of the fruit God had forbidden She gave to Adam to eat, and immediately a new nature was present with the parents of the human race From the moment they responded to Satan's appeal, a battle for supremacy was on in their lives That battle was between God and Satan, or the God nature and the Satan nature Note how the Apostle Paul expresses it in Romans 7 14, 15, 22, 23 "For we know that the law is spiritual but I am carnal, sold under sin For that which I do I allow not for what I would, that do I not, but what I hate, that do I"

Here are two natures presented carnal (sinful), spiritual (righteous) Now note that Paul had a real battle with these natures "For I delight in the law of God after the inward man But I see another law in my members, warring against the law of my mind, and bringing me into captivity to the law of sin which is in my members." All have two natures by inheritance, one from God, the other from Satan. We are all conscious of the presence of both natures as we battle for the right Evil is always there to lead away from right

Let us define these two natures One is called "spiritual" This is the Christ or godlike nature The other is called "carnal" This is self or Satan To gain eternal life, we must slay self What is self? In Isaiah 1 6 God, in describing a sinner, says "From the sole of the foot even unto the head there is no soundness in it; but wounds, and bruises, and putrefying sores they have not been closed, neither bound up, neither mollified with ointment" Imagine a sore filled with pus Just so the sinner without Christ appears before God "*The heart is deceitful above all things, and desperately wicked who can know it?*" Jeremiah 17 9

This nature we must battle with every hour, every day We must realize our condition as inherited and then invite Christ to fight the fight of faith with us When we have difficulty with self, it is evidence we are not surrendered to Christ We do well to remember this

Which of the two natures will control? Answer The stronger In the natural order of war, when nations strive for supremacy, one nation wins, and this is the stronger nation So it is with human beings In order to strengthen the Christ nature, obey Him, do that which is right and good To make strong the Satan nature, do evil The nature that one surrenders to wins

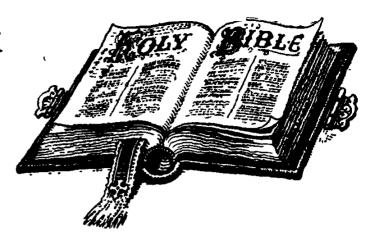
We see the result of surrender to both natures today See the Christian—happy, courageous, living with Christ daily See the sinner—unhappy, uncertain Jails are filled to capacity by those who are controlled by Satan's nature

When *nations go to war they* generally have allies So it is in war

(Continued on p 30)

YOU AND THE BOOK

HIS GLORIOUS APPEARING

ALMA L. TIBBS

1 Titus 2:13—The return of Jesus will be a glorious event

"Looking for that blessed hope, and the glorious appearing of our Saviour Jesus Christ"

2 Matthew 24·30—He said He would come with great glory

"And they shall see the Son of man coming in the clouds of heaven with power and great glory"

3 Luke 9 26—The glory will be threefold

"For whosoever shall be ashamed of Me and of My words, of him shall the Son of man be ashamed, when He shall come in His own glory, and in His Father's, and of the holy angels"

4 Matthew 17 2—Jesus appeared in His glory on the Mount of Transfiguration

"His face did shine as the sun, and His raiment was white as the light"

5 Ezekiel 1 28—The Father's glory appears as a rainbow

"As the appearance of the bow that is in the cloud in the day of rain, so was the appearance of the brightness round about This was the appearance of the likeness of the glory of the Lord"

6 Matthew 28 2, 3—An angel appeared in his glory at the tomb of Jesus

"The angel of the Lord descended from heaven, and came and rolled back the stone from the door His countenance was like lightning, and his raiment white as snow"

7 Matthew 28 4—The soldiers on guard were stricken from before the angel-one

"And for fear of him the keepers did shake, and became as dead men"

8 Matthew 25 31—*All* the holy angels will attend Jesus at His coming

"When the Son of man shall come in His glory, and all the holy angels with Him, then shall He sit upon the throne of His glory"

9 Hebrews 12 22—The host of angels is numberless

"But ye are come unto Mount Sion, the heavenly Jerusalem, and to an innumerable company of angels"

10 Psalm 50 3, Isaiah 30 30—The demonstration will be audible as well as visible

"Our God shall come and shall not keep silence a fire shall devour before Him, and it shall be very tempestuous round about Him The Lord shall cause His glorious voice to be heard, and shall show the lighting down of His arm with the flame of a devouring fire, with scattering, and tempest, and hailstones"

11 Revelation 1 7—Everyone will witness it

"Behold, He cometh with clouds, and every eye shall see Him, and they also which pierced Him"

12 Luke 23 44, 45—Nature mourned the death of her Creator

"And there was a darkness over all the earth And the sun was darkened"

13 Revelation 6 14—She will welcome His return

"And the heaven departed as a scroll when it is rolled together, and every mountain and island were moved out of their places"

14 Isaiah 26 19—The earth will give up the dead

"Thy dead men shall live, together with my dead body shall they arise Awake and sing, ye that dwell in dust for thy dew is as the dew of herbs, and the earth shall cast out the dead."

15 Job 34 20—Though the date is not given, the Bible seems to imply that the events centring around Christ's return will reach an important climax at midnight

"The people shall be troubled at midnight, and pass away and the mighty shall be taken away without hand"

Note How thrilling to see midnight turned into day! And then to behold the lovely countenance of the Saviour of men!

16 Daniel 12 2—Immediately preceding His appearance will be a resurrection of some righteous and some wicked men

'And many of them that sleep in the dust of the earth shall awake, some to everlasting life, and some to shame and everlasting contempt"

17 Matthew 26.64—Jesus told the high priest and those who condemned Him at His trial that they would see Him coming in the clouds

"I say unto you, hereafter shall ye see the Son of man sitting on the right hand of power, and coming in the clouds of heaven"

Note. These individuals have all died many years ago, therefore they must be raised from the dead to see Him come

18 Psalms 50 6, 119 172—God's law will be emblazoned upon the sky

"And the heavens shall declare His righteousness for God is Judge Himself All Thy commandments are righteousness"

19 1 Thessalonians 4 16—Then the voice of the Lord Jesus will awake the righteous dead

"For the Lord Himself shall descend from heaven with a shout, with the voice of the archangel, and with the trump of God and the dead in Christ shall rise first"

20 1 Thessalonians 4·17—The right-

eous living will be gathered up with them, brought from their graves to meet the Lord in the air

> "*Then we which are alive and remain shall be caught up together with them in the clouds to meet the Lord in the air and so shall we ever be with the Lord*"

21 John 14 2, 3 All will journey together to the Father's house, where Jesus the Redeemer is now preparing mansions for them

> "*In My Father's house are many mansions I go to prepare a place for you And if I go and prepare a place for you, I will come again and receive you unto Myself, that where I am, there ye may be also*"

MEN WHO PROVED

(Continued from p 32)

Palestinian cartographer, C W. M Van de Velde, had produced his map of Palestine in 1858

The researches of these explorers and map makers made a great impression in England and inspired the organization, in June, 1865, of a society known as The Palestine Exploration Fund, dedicated to a "complete systematic scientific exploration of the Holy Land with the object of aiding in the elucidation of the Scriptures" Some £10,000 was subscribed, and Captain (later Sir Charles) Warren and Captain (later Sir Charles) Wilson were sent out on its first expedition to concentrate largely on ancient Jerusalem

Captain Conder and Lieutenant (later Lord) Kitchener followed in 1877 and 1878 and began the great Ordnance Survey of Palestine which occupied the society for many years

The four volumes and map recording their great work put no fewer than 10,000 names on the map of Palestine west of the Jordan, and identified two thirds of the 600 places mentioned in the Bible record

In 1881 Captain Conder began a survey of Moab on the other side of the Jordan, while the German Palestine Society, under the direction of Dr Schumacher of Haifa mapped Gilead and Bashan

Since this time the work of exploration and mapping has gone on, one of the great names associated with this work in the days before World War I being Colonel Lawrence, who gained fame as Lawrence of Arabia for his part in fomenting the Arab Revolt against the Turks.

Thus, by 1918 every hill, valley, and stream in Palestine had been mapped and every city, village, *tell*, and *khirbeh* sited, providing a substantial basis for the next stage, that of excavation for the vindication of the sacred Record

How Napoleon Helped Beginnings in Egypt

We have mentioned the reconstruction of the map of Palestine first because it is pre eminently "the Holy Land," but actually Egypt was opened up to biblical studies earlier than Palestine and in a very different way

At the beginning of the nineteenth century Egypt was a military prize which Napoleon Buonaparte was seeking in an endeavour to dominate the Middle East and cut Britain's line of communication with India

Besides being an ambitious aspirant to world empire, however, Napoleon was deeply interested in scholarship and culture and so, when he set out in 1798 to conquer Egypt, he took with him a body of scientists of the French Academy When he had reduced Egypt to submission, he at once set them to work, and their diligent researches resulted in the publication, between 1809 and 1813, of *A Description of Egypt*, comprising twenty four volumes of text and twelve volumes of pictures, which laid the foundation of our modern knowledge of ancient Egypt

"Few armies," says James Baikie in his book, *A Century of Excavation in the Land of the Pharaohs*, "have left behind them such a memorial of their passage across a land—the more credit to the man whose inexhaustibly fertile brain conceived the idea of making even war subserve the interests of science"—page 8

Other expeditions followed up the fine beginnings made by the scientists of the French Academy The Frenchman Jean Francois Champollion and the Italian Rosellini explored far up the Nile to the ruined temples of Nubia, while a German scholar, Karl Richard Lepsius, after beginning in the pyramid fields of ancient Memphis, near Cairo, penetrated beyond the Second Cataract, to open up the Ethiopian civilization of the Upper Nile and show its linkages with Egypt at Napata and Meroe

First Exploration in Babylonia

The lands of Babylonia and Assyria Before the cutting of the Suez Canal, the Tigro-Euphrates Valley proved the most practicable overland route to India, and posts of the East India Company were established at Bagdad and Basra in order to facilitate communications

In 1807 the company appointed as its resident in Bagdad, Claudius James Rich, who from early years had been deeply interested in oriental languages and history. And so, on every occasion when there was an intermission in his official responsibilities, Rich pursued his historical and archæological studies

The sites of Babylon and Nineveh were about the only ones of which any knowledge had been retained, and even of these the descriptions of travellers between the twelfth and eighteenth centuries were meagre and vague To Rich, therefore, we owe the first accurate descriptions of these capitals of antiquity and their environs His two memoirs on Babylon and the nearby Birs Nimrud appeared in 1812, and 1818, and in 1820 and 1821, returning from a trip to Persia and Kurdistan, he explored some of the most important ruins of Assyria, including Erbil (Arbela), Nineveh, and Nimrud

From the material gathered during these extensive travels, Rich was able to prepare the first modern map of the Tigris from Mosul, opposite Nineveh, down almost to Bagdad and Babylon, and to make a beginning on a map of the Euphrates which was filled in with a wealth of detail by the British Euphrates Expedition led by Colonel Chesney

In southern Babylonia, the East India Company's residency in Basra likewise served not merely as an important commercial outpost, but as a centre of exploration, and to major J E Taylor, the Resident there for many years, must be given the credit of identifying, in 1854, the site of Ur of the Chaldees, the original home of Abraham

So by the second half of the nineteenth century, while there were many scattered areas still to be filled in, the ancient maps of the biblical lands of the Middle East—Palestine, Egypt, Assyria, and Babylonia—had been largely reconstructed

Thus the way was prepared for the next important stage in the vindication of the Bible's trustworthiness—the search for evidence by the systematic excavation of the ancient sites.

The electric light bulbs here show the first known use of electric power from atomic energy The bul[illegible] lighted by electricity from the generator at the right The generator is run by a turbine which uses steam produced by means of heat supplied by the Experimental Breeder Reactor at Idaho Falls in the United States

[illegible]

The atom powered train shown in this artist's sketch was designed by the U S physicist, Dr Lyle B Borst of the University of Utah Steam for the Locomotive would be obtained from a small atomic reactor or boiler only two feet wide, three feet high and three feet long Yet this boiler would produce as much steam as the largest steam locomotive Electricity generated by a turbine would turn the wheels The locomotive would run for a year on 11 pounds of uranium and would develop 7,000 horsepower, or four times as much power as a modern Diesel locomotive It would cost about $1,200,000 or about twice the cost of a comparable four-unit Diesel engine

The Oriental Watchman and Herald of

Health

A Magazine for Health and Happiness

ıe-Minute Articles
Interest For

*   *

Fathers

*   *

Mothers

*   *

ys and Girls

*   *

Students

*   *

verybody

February 1955

CLEANSING ENEMA

STELLA PETERSON, R N , B Sc

T[illegible]

[illegible]

Necessary [illegible]

[illegible]

[illegible] Make up [illegible] pint of [illegible] at about 105° F.

Procedure

1. [illegible] bed-covers back and [illegible] patient with a bath blanket.
2. Place newspapers or rubber sheet and a towel under the patient.
3. Turn the patient on the left side with the knees flexed.
4. Allow solution to flow through the tubing to remove the air before inserting the tube.
5. With low pressure allow the solution to run in slowly. By slowly distending the lower bowel a normal stimulus to defecation is stimulated.
6. The rate of flow of the solution can be controlled by the height of the can above the bed or by pinching the tubing. The can should seldom be raised more than twenty-four inches above the bed, as it will produce too great pressure within the colon. Give solution slowly, and if patient complains of a desire to expel it, stop flow for a few seconds by pinching the tubing.

When the solution has been given, as much as the patient can take, close the clamp on the tubing and remove the tube gently. Wrap the enema tip in toilet tissue. A small amount of solution repeated is better than a large amount because the latter distends the bowel and it loses tone necessary for contraction.

8. Place the patient on the bed-pan. Stay within call.
9. If the patient is unable to relax enough to take sufficient fluid, instruct him to breathe deeply or to flex knees upon abdomen.
10. Stay with the patient if he is very ill and assist if necessary.
11. Note the condition of the patient and the results of enema.
12. If the patient cannot retain, after the bed-pan is emptied
13. Replace the bed-covers and make the patient comfortable.
14. The equipment should be cleansed thoroughly and put away.

Precautions

1. Give the enema slowly to avoid cramping.
2. If the patient cannot retain the solution, place him on the bed-pan while giving it.
3. Have the correct temperature 104 F. unless otherwise ordered.
4. Soapsuds are not used because they irritate the bowel lining.

Indications

1. To stimulate peristalsis.
2. To cleanse the colon.
3. To stimulate evacuation.

Diagram of abdominal organs
1 Œsophagus 2 Stomach 3 Duodenum 4 Small Intestine 5 Colon 6 Cæcum 7 Rectum

The Oriental Watchman and Herald of

HEALTH

46th YEAR OF PUBLICATION

Contents

February 1955

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J B OLIVER, M D, D T M Associate Editor

FEATURE ARTICLES

FOR BOYS AND GIRLS

FOR MOTHERS

FOR EVERYBODY

OUR COVER

Our little friend enjoys an early morning splash even though it has to be taken in the old bath-tub

Photo by N Ramakrishna

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Minute Meditations

THE FACE OF A BROTHER

D. A. Delafield

L. W. KILGORE tells the story of an American Indian looking out across the plains who saw an object on the horizon, and supposing that it was a wild animal, prepared to run. As it drew nearer he saw it was a man on a horse. Assuming him to be an enemy, he prepared to shoot. As the man came nearer he saw it was not an enemy but one of his own tribe, and he prepared to welcome him. When he drew up close, he recognized the face of his brother and embraced him.

This little story sheds much light on the question of human relations. What the Indian conceived to be a wild animal proved to be a fellow man on horseback. Here is the sequence: wild animal, fellow man, member of his tribe, his own brother.

If we will get close to people in sympathy, we will recognize all men as our brothers. Every man is a brother man. Every face is the face of one near of kin.

A few pride-shattering questions, suggested by Coston J. Harrell: "Is the ignorance and poverty of the lowliest repulsive to you, or does your heart go out to them? On street and highway do you see only the crowd, or do you see the pinched faces of little children and the discouraged faces of young men and women struggling against heavy odds, the tragic faces of the aged who have known better days, and the hard faces of those who never had a fair chance? Are you indifferent to others' limitations and sorrows and sins, or are you wounded by them? Answer these questions, and you will know whether you have the mind of Jesus the Christ."

(Continued on p 5)

THE EDITOR SAYS

BAN PAN!

A PRACTICE that is peculiar to oriental lands, and especially to India and its adjacent countries, is the chewing of pan supari or betel It is a habit that is indulged in by over fifty crores (500,000,000 of men and women and most of them reap its ill effects sooner or later

In almost all that is evil there is something good and it may be possible that something may be said in defence of the practice of betel chewing, but in its extreme forms the habit is filthy, annoying to those who do not indulge in it, and deterimental to health in general and to the mouth and teeth in particular

Betel chewing is a practice that is not restricted to any class of people but is indulged in by rich and poor, and wherever it is prevalent, the spitting of the juice is a nuisance that is widely tolerated The pillars and walls of buildings, telegraph posts and letter boxes, and chairs and garden seats in parks seem to be the targets of the "sharp-spitting" betel chewers, and carry the tell-tale stains of the juice, which cannot easily be eradicated

But worse than the indiscriminate disfiguring of the surroundings is the detrimental effects on the health of the chewer himself

In countries where the chewing of betel is a widespread custom and habit, cancer of the mouth is frequent A doctor in Ceylon has stated that the lime mixed with betel leaves, areca-nut and tobacco is the agent that is mainly responsible for bringing about the conditions that induce cancer of the cheek, *buccal carcinoma* The greatest proof against the use of betel is the high percentage of mouth cancer in betel chewers

One doctor states that in the course of his twenty years of medical practice he had occasion to examine over five hundred thousand patients of whom more than two hundred thousand showed the ill effects of the practice of betel-chewing in damage to tongue, mucous membrane, gums and teeth

Those who chewed betel only occasionally did not show any ill-effects at all Those who chewed betel regularly had their teeth badly stained and their tongue and mucous membrane were red, granular and sensitive and the extent of gum damage was similar to that seen in cases of pyorrhoea In some cases the gums had become inflamed and the upper portion of the sockets of the teeth were enlarged causing slight loosening of the teeth In other cases the gums were enlarged and thickened and had become detached from the neck of the tooth Blood and pus exuded from the grooves between the gums and teeth The constant action of the irritants in the quid caused inflammation and the gritty particles of the areca-nut, betel leaves, lime and other matter, by lodging in the grooves, increased the irritation and accelerated th process of destruction.

In the case of those who "chain' chewed all day long and who ever went to bed with a quid in th mouth, a non-inflammatory gun disorder was seen to be present anc the constant chewing of the bete quid and the chemical action of th lime resulted in the spreading anc loosening of the teeth and mad them assume unnatural positions Pus exuded from around the teet and in the later stages the teeth hac become so loose that they woulc fall out during mastication or coulc be plucked out with the fingers.

This damage to the teeth anc gums though serious and alarmin was not the most serious result o this harmful habit The damage t the tongue and the mucous mem brane of the mouth developed th areas in which cancer was founc to begin The lime and tobacco i the betel quid caused areas in th mouth to become blood-red, granu lar and sensitive and these area became white as the chewing wa continued The irritation caused b the misplaced teeth and the constan presence of the quid, brought abou other changes which resulted i ulcers, and after two or three year of more chewing, the evidence o cancer of the cheek and lips anc more rarely of the tongue wa evidenced

Even at this stage it was founc in certain cases that the worst coulc be averted by discontinuing th harmful habit and undergoin treatment at the hands of a physi cian

The report from a large institu tion that treats cancer patients i great numbers states that the mout is the most frequent site for cance and for the area that the particula institution serves, the death rat from cancer of the mouth is th highest in the world

Cancer of the mouth that i caused by betel chewing can b attributed to the following factors (1) The friction, irritation and in

flamation caused by the constant retention of the quid of betel in the mouth and also by the maladjustment of the teeth which come into unnatural contact with the mucous membrane of the mouth, both of which bring about a condition of ulceration (2) The continued and prolonged irritation caused by the components of the betel quid, lime and tobacco being the most harmful, which develops malignancy in the ulcers

The evil effects of excessive betel chewing on the body in general are very similar to those of other habit-forming drugs and alcohol, and we look to the leaders of our nation to take the necessary steps to enlighten the peoples of our land of

(Continued on p 28)

The Face of a Brother

(Continued from p 3)

When men are thrown together by disaster, when they meet face to face in the emergencies of war and peace, the differences of race and rank, colour and creed, wealth and poverty, disappear Five-star generals and privates, millionaires and paupers, coloured and white, appear as human brothers, dependent on the goodness of God and their own understanding of sympathy.

Our heavenly Father knows our frame and remembers that we are only dust. He has fashioned all human hearts alike. It is eternally true that—

"There's no place where earthly sorrows are more felt than up in heaven;
There's no place where earthly failures have such kindly judgment given."

On earth we may learn to see in the face of every man "the face of a brother"—and a son of God. Let not our sympathy fail us because the prejudices and customs of society have created long distances between us. If we will, we may bridge the gap and learn how to live with one another in peace and charity.

WHAT'S IN THE NEWS?

Large tea estates in Ceylon cultivate 3,000 to 4,000 tea bushes to the acre

* * * *

What would happen if a pilot of a supersonic jet plane were forced to bail out at supersonic speed? Would he survive? The answers are being sought at the Holloman Air Development Centre in New Mexico Recently the chief of the aero-medical field laboratory there, Lieut Col John Paul Stapp, was rocketed at 421 miles an hour in a railroadlike sled and brought to a stop so suddenly that his 180-pound body would have registered 3,960 pounds on spring scales, reports "Science News Letter" He experienced *22 times the normal pull of gravity and survived*

* * * *

Atomic physics has introduced a new measure—the "barn" It represents 100 quintillionths of a square centimetre

* * * *

It takes 100,000 pounds of tiny water vegetables to eventually produce one pound of codfish, edible by man This is the way it works To manufacture that pound of flesh the cod ate ten pounds of smaller fish *The smaller fish had eaten 100 pounds of even smaller fish Those fish* had consumed 1,000 pounds of very small shellfish The shellfish had built their substance from 10,000 pounds of water animals so small a microscope is needed to see them They in turn had fed on 100,000 pounds of water vegetables even smaller than they These figures were recently used by Dr Francis Joseph Weiss, a noted authority on food and nutrition, to demonstrate "the food pyramid of the sea" and to show how little man has done to exploit its possibilities

* * * *

Doctors specializing in allergies may find use for the Geiger counter in tracing what happens in the body of an allergy victim when he swallows or inhales or touches the substance he is sensitive to The allergy producing protein would be "tagged" by a radio-active iodine molecule that could be followed as the protein is carried in the system One of the puzzles in developing a treatment for allergic diseases has been to locate the tissue in the human body where the allergic reaction takes place By using the tagged proteins and a Geiger counter, doctors hope to find this spot.

* * * *

The first recorded case of cancer as the aftermath of an atomic burn **has been reported in Japan The victim is now 64 years old, reports a** *pathologist of Hiroshima University He suffered burns on the back of* the head when the atom bomb exploded nine years ago The wound has not healed, and recently cancer was detected

* * * *

Mosul will soon be the site of Iraq's first cotton spinning and weaving factory

* * * *

Physicians used to measure the degree of body heat with their hands, *before the thermometer was invented.*

* * * *

A first edition of "Pilgrim's Progress" **was recently found by a tradesman of Derbyshire, England He sold it for $7,000**

HIVES

PAUL D. FOSTER, M.D.

What price strawberries and cream? Or does water-melon make you break out in big bumps?

"OF LATE years in New England and some other parts of the United States the caterpillar of the brown-tailed moth has caused much discomfort. The hairs are widely distributed by the wind, and the barbs are so arranged that they readily work into the skin. Whole families have been affected by an intense eruption which has been mistaken for that of small-pox."

Thus wrote (in the early 1900's) the late Sir William Osler, famous physician, teacher, and medical writer, about hives.

The ancients mentioned the strange affliction that some people get from sources that are perfectly harmless to others. Hippocrates, the great-grandfather of modern medicine, wrote of "food idiosyncrasies." And the well-worn axiom, "What is one man's food is another man's poison," was stated before the days of the Crusades. In other words, hives is not new to mankind.

Only recently, though, have physicians begun to understand hives.

In earlier days, except when it was known to be a result of certain foods, it was thought to be a result of some other type of illness, such as gall-stones or jaundice. Now, however, hives is recognized as an allergic reaction, not as an aftermath of other infections.

Doctors know essentially what causes hives. But they don't know why the body reacts as it does to certain substances.

Two small boys playing in a neighbour's orchard disturbed some bees. Each child was stung on the face and arms. One of the boys had only temporary pain and lumps from the stings, and he quickly recovered. The other boy became violently ill, and, only partly conscious, was rushed to the doctor. The doctor recognized the trouble, and gave treatment necessary to relieve the boy's condition.

Why was the second boy so sick? He was exceedingly sensitive to the poison from the bee. Why? Nobody knows.

But physicians do know that the skin sometimes becomes extra sensitive to certain things—food, the poison of bites and stings, heat, cold, pollen, and even the effects of nervous upsets. When this over-sensitization occurs, the cells of the skin react by producing a poison known as histamine. This poison causes the rash, welts, and swelling of hives.

In the treatment of some kinds of hives, doctors use injections of anti-histamines to de-sensitize the skin. This treatment does not work for all hives, unfortunately. Researchers are still puzzling over the problems of over-sensitization and its causes, as well as seeking methods for preventing or for neutralizing this condition.

There are five major sources of hives:

1. The most familiar is food. The most common offenders are strawberries, tomatoes, pork, nuts,

J. Vyrawalla

Food is one of the five major sources of hives. It may be that the luscious water-melon is the cause of hives in your case.

shell-fish, chocolate, heavy seasonings, and carbonated drinks.

Some doctors believe that it is not always completely the fault of the food, but sometimes something in or on that food For example, they say that milk from one herd may cause the allergic reaction, whereas milk from another herd that has eaten a different type of feed may not One physician has published evidence that strawberry-sensitive people can eat without ill effect strawberries that have been thoroughly washed in a colander under hot water

However, these findings have not been universally accepted And in cases of food allergy, doctors must first discover what foods the pat ent is reacting to When the doctor has discovered them, the patient must refrain from eating those foods George Walter Thornbury said, "The fool that eats till he is sick must fast till he is well" This applies to treatment for hives, with a slight twist "The man against whom food contrives must fast to keep from getting hives"

2 Another cause of hives is that group of allergens (allergy-producing agents) including insect bites and stings, tiny punctures from jelly-fish, nettles, and (as Osler said) some kinds of caterpillars

Everyone reacts to these to a degree, for each carries a poisonous substance into the skin But in hyper-sensitive people, like the little boy described earlier, the bite or sting itself plus their own reaction can cause alarming, if not dangerous, results

3 A third cause of hives is abnormal reaction to heat, cold, and light

An interesting example of this was reported in a medical journal by Dr W T Vaughan A woman broke out with hives while swimming across a cold mountain lake Thinking she was allergic to cold, her friends wrapped her in warm blankets and gave her hot stimulants. This only made the

The best way to combat hives is to ascertain the cause and to do all you can to avoid things that offend

hives worse The doctors discovered that she was allergic to heat and that during the icy swim she had generated enough body heat to produce hives!

4 A source of irritants producing hives in a relatively small number of people is inhalants, notably pollens of the same types as those causing hay fever

Often people who are sensitive to these air-borne allergens have the misfortune of being allergic also to certain foods This makes the cause of the hives more difficult to track down Also, the few people who are affected by pollens have more difficulty in avoiding these air-borne allergens

5 A possible cause of hives is emotional disturbance, particularly nervous exhaustion

It is quite possible for your mother-in-law to cause your hives. It is possible to be "allergic" to tomatoes at home, yet be able to eat them without bad effects while on vacation Nervous tension and fatigue are always suspect to a doctor treating a patient with hives, and the doctor is called upon to help his patient find a reasonable solution to the problems causing the emotional upset Sometimes just getting enough rest can relieve hives

You do not inherit hives, even though it may seem so because of its presence in several members of

(Continued on p 28)

DIET in PREGNANCY

DELLA REISWIG HOLM, B. S., DIETITIAN

All babies deserve a good start in life, and mothers the best of care.

FOR a strong healthy baby and fewer complications of pregnancy, labour, and delivery, eat enough of the right food before and during the time you are carrying your baby You can be sure of good results for they were proved by more than five years of intensive research studies made in Canada, England, and the United States by scientists There is no guesswork about it Good eating habits will benefit your dear little baby for life

The relationship between nutrition and pregnancy was shown by laboratory workers in the experimental animal illustrations they presented at the University of Wisconsin Agricultural Experimental Station more than thirty years ago They saw that damage to the unborn results from too little of various types of food

One of the first of these experiments revealed the effects of the different rations corn plant, wheat plant, oat plant, and a mixture of these-- upon heifers during growth and reproduction

The heifers fed on wheat only were rough, unkempt and produced small, premature young who were either still-born or died within a few hours Those fed only a mixture of grains were fair in appearance, but their young were either too weak to survive or still-born But those fed only oats were sleek and healthy looking, their offspring were full-term, vigorous young, and normal in size

When the scientists continued this experiment another year, they had the same reproductive record It was later shown that the wheat-plant ration was entirely satisfactory when supplemented with bone meal and cod-liver oil Further experiments resulted in the hairless pig, which proved to be due to a low intake or assimilation of iodine

The researchers began to question the old idea of "a tooth for each child" when these diet deficiencies, usually causing the death of the fœtus, interfered more with fœtal development than with the health of the mother

Even more startling were the abnormalities resulting from diet deficiencies --cleft palate, harelip, congenital blindness, misplaced kidneys, and cysts under the skin—produced by F Hale

He concluded "These experiments do present a new field of thought and place diet during the early stages of embryonic development in a very important position "

J Workany and his laboratory associates have helped us to understand the relationship of maternal dietary deficiency to congenital malformation in the rat He concludes that the stores of maternal tissues act as "buffers which prevent deprivation of the developing embryo as long as possible In fact, it was assumed until recently that these maternal stores either protect the offspring completely, thus resulting in the delivery of normal young, or that in case of extreme dietary deficiency the embryos die in utero Although there is some truth in this 'all or none' theory, it is not entirely correct Between the two extremes there exists a narrow range in which maternal nutritional deficiency may result in the arrest of the embryo's development without causing death The result may be congenitally deformed offspring "

The effect of general dietary deficiency in human pregnancy has been studied on large numbers of women since the early animal experiments Every effort has been made to keep these studies scientific There were control groups, and detailed nutrition histories were made The scientists compared the mothers as to diet They used a method of rating for specific foods and for the general standard of the diet

You will be interested in the studies, for they revealed significant facts

1 One of the first reports to arouse considerable interest was conducted by Ebbs and his co-workers in Toronto They studied one group of 120 women on poor diets with low incomes in contrast to 90 women on equally poor diets with low incomes, but their diets were supplemented with milk, eggs, cheese, oranges, tomatoes, wheat

[illegible], and vitamin D capsules. They taught another group of 170 women with fairly adequate incomes the type of diet to follow. Miscarriages, premature births, still births, and deaths before six months of age were definitely higher in the poor-diet group

The 260 women on good diets enjoyed better health and had fewer complications It is estimated that 68 per cent of the women having good or excellent diets suffered no complications, but only 42 per cent of the women with poor diets had a normal course of pregnancy.

2. The People's League of Health in England studied 5,522 expectant mothers with respect to maternal and infant disease and death Fifty per cent of the women were given supplementary minerals and vitamins As a result, there were about 20 per cent fewer cases of toxæmia in pregnancy

Although toxæmia isn't entirely a problem of nutrition, if the practice of giving supplementary food was routinely followed, it is estimated there would be ten thousand fewer cases of toxæmia a year

There was also a reduction in the number of premature births The final report was that although toxæmia did not occur in connection with good or excellent diets it did occur in 8 per cent of the women whose diets were fair and in 44 per cent of those whose diets were poor

3 A significant study was carried out on 216 women by Mrs B. S Burke and her co-workers They reported that the diet of the mother during pregnancy determined the condition of her infant at birth

In these 216 cases every still-born infant, every infant who died within a few days of birth except one, the majority of infants with marked congenital defects, all premature infants, and all "functionally immature" infants were born to mothers whose diets were poor

It is of special interest that infants in the poor-maternal-diet group averaged three pounds less at birth and were much shorter than those in the good- or excellent-diet group, yet there were many more difficult deliveries in the poor-diet group

It is reasonable to conclude that women on good diets are better obstetrical risks and have shorter labour and fewer difficulties during delivery than women on poor diets

4 Balfour and his workers studied 11,618 pregnant women in the lowest income groups in England and Wales. One group of women received 240 international units of thiamine daily in the form of yeast extract or Marmite—a product similar to Vegex, Savita, or Savorex. Another group received a preparation that furnished a rich supply of vitamin

(Continued on p 28)

FOOD PATTERN FOR NORMAL ADULT WOMEN

Guide for Daily Meal Planning

Milk (whole, evaporated, buttermilk, or skim milk)	1 pint
Fruits and vegetables	5 or more servings
Potatoes	1 serving
Green or yellow	2 servings
Tomatoes or citrus fruits	2 servings
Eggs	1 serving
(On the days you do not serve eggs, use dried beans, peas, or peanut butter)	
Entree of high-protein value	1 large serving
(Add dried beans, lentils, peas, peanuts, peanut butter, nuts, cottage cheese, wheat germ, or brewers' yeast to entree recipes)	
Bread and cereals	2 or more
Whole wheat, or oatmeal, brown rice, Ralston, Wheatena, Shredded Wheat, Ruskets	
Butter and margarine	2 or more tablespoons
Fortified with vitamin A	
Other foods to satisfy the appetite	

FOOD PATTERN

for

PREGNANCY Normal Diet Plus		LACTATION Normal Diet Plus	
Milk	1 pint	Milk	1 quart
Citrus fruit or tomato	1 serving	Citrus fruit or tomato	1 serving
Leafy green vegetable	1 serving	Leafy green vegetable	1 serving
Protein entrée	1 serving	Protein entree	1 serving

Simple Treatment

for

COLITIS, RHEUMATISM, BRONCHITIS, SORE THROAT and COLDS

WELLS ALLEN RUBLE, M D

THERE are numerous minor treatments that can best be carried out by the use of water One of the most beneficial of these is the moist abdominal bandage Of course, all these treatments must be given under competent medical advice

MOIST ABDOMINAL BANDAGE

This application, known as an M A B, is useful in many abdominal disorders, such as constipation, excessive gas in the intestines, colitis, inflammation of the stomach, diseases of the liver, indigestion, and inflammation of the pancreas The M A B should follow an application of fomentations or radiant heat to the abdomen

Preparation of Bandage Take a piece of cheesecloth or gauze, or a thin piece of an old sheet a yard and a half long and two feet to three feet wide according to the weight of the material, two feet wide if heavy and three feet wide if very thin Fold this lengthwise, folding eight inches in from the edges until a long strip eight inches wide is folded together This is bandage No 1

Take a strip of flannel two yards long and ten inches wide, and roll it crosswise into a roll, until ready to use This is bandage No 2

Lay No 2 across the bed or couch so that when the patient lies on it in bed, the bandage will extend from the pubis to the lower end of the breast-bone

Wring No 1 out of cold or tepid water as dry as can be wrung, and place it on top of No 2, spread out smoothly, having the flannel extend an inch on either side of No 1

Set patient on bed so that the M A B lower edge just touches his back Lay patient down on his back on bandage, bring one end of No 1 over patient just so that it touches No 1 on the opposite side Bring over the other end of No 1 When applied, the double part of No 1 should extend from the mid-axillary line (that is, a line drawn down from the middle of the armpit) on one side to the mid-axillary line on the other side This makes part of No 1 double over the abdomen Bandage No 2 should extend two or more times around the body Picture in upper right-hand corner shows bandage completely applied and pinned snugly

The moist abdominal bandage. Above: Ready to apply to the patient The white bandage is moist and the dark one dry Right The moist bandage wrapped around body, with the remaining length lapping over the abdomen.

Above The dry piece of flannel is wrapped around the moist bandage, covering it completely, and is pinned firmly in place. This treatment is useful in many abdominal disorders, such as constipation, excessive gas, colitis, and diseases of the liver

Wet Sheet Pack

This procedure is one of the most effective methods in the use of hydrotherapy. It is especially effective in reducing high temperatures, in quieting patients in delirium or maniacal attacks, and is an excellent means of treating nervousness and insomnia

Technique Wring an entire sheet as dry as possible out of cold, tepid, or hot water Spread it on an oilcloth on a bed, and have patient lie full length, legs slightly apart, arms at sides

Grasp lower corner of sheet, bring it over and around leg on that side, spread sheet over patient and under opposite side, tucking it under smoothly and creasing it between arm and chest on that side, and folding upper corner and edge around neck, between arm and chest

Grasp other lower corner, wrap it around feet and legs, tucking snugly under opposite side, covering both arms and holding upper corner and edge under chin and over and around opposite shoulder and arm Press sheet down, creasing it between arm and chest

Wrap patient lightly with blanket or leave exposed Apply cold to head and give plenty of water to drink If temperature is high, sprinkle frequently with cold or tepid water or use spray or garden sprinkler Patient may go to sleep and rest an hour or even two hours in the pack Even children in a high fever (not eruptive diseases, such as chicken pox, measles, etc) may be treated this way with a sheet of appropriate size

The wet sheet pack. The patient wrapped securely in the wet sheet, which is tucked in well Right The completed pack, with the patient wrapped firmly in a blanket Give cold to the head, and plenty of water to drink

Heating Compress

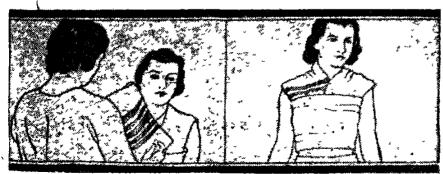
The heating compress is valuable in many conditions It is especially applicable in sore throat, tonsilitis, and related afflictions It is similar in construction to the M A B, but smaller It is applied in the same way following fomentations or termolite to the throat Compress No 1 should extend from one side of the throat completely around the neck and to the opposite side, thus making a double thickness in front and a single thickness elsewhere The moist part, No 1, should in all cases be thoroughly and snugly covered by No 2

The heating compress is well adapted to the treatment of arthritis or rheumatism of the knee, ankle, elbow, wrist, or any inflammatory disease of these joints

Roller Chest Pack

A heating chest pack is well adapted to bronchitis, cold in the chest, pneumonia, asthma, and croup—of course under proper medical advice and supervision Bandages similar to those used in the M A B are appropriate if long enough and of proper width

Following fomentations, bandage No 1 is wrung out of cold water after being rolled lightly Place roll with end of No 1 diagonally across breast-bone about mid-point of sternum Unroll it gradually and bring snugly up over left shoulder of patient with right hand while holding end of No 1 over sternum with left hand Pass over left shoulder, across back and under right arm, across chest under left arm, and across back and up over right shoulder to starting point Smooth No 1 out on skin throughout, about the neck, shoulder, upper arm, armpit, and lower

(Continued on p 24)

The roller chest pack. The wet bandage starts at the breastbone, over the left shoulder, under the right arm, across the chest, under the left arm, over the right shoulder, to the starting point. On the right is shown the dry bandage, applied in the same way Be careful that it overlaps the wet bandage.

BRUCELLOSIS—
Milk Fever

ROBERT P. LITTLE, M.D.

One man's hobby reaches down eighty years to give you better health.

IN THE eighties of the last century Dr David Bruce, an English army physician, was ordered to the island of Malta While there he made a hobby of studying a mysterious disease known as Malta fever Later this malady was known to be spread by goat's milk, a staple food of the islanders

Working with little equipment, Dr Bruce organized a small laboratory, and aided by his wife, carried out experiments on monkeys he purchased with his own money So primitive was his equipment that he was even forced to boil the agar (a Japanese seaweed used as a culture to grow bacteria) on the kitchen stove

Success crowned his untiring efforts, for he finally isolated the bacillus, or germ, that is the cause of Malta fever It bears the name *Brucella melitensis* in his honour

The scene of the battle against undulant fever shifted to Denmark, where Dr Bernhard L F Bang found a germ causing abortion in cattle and swine. Not until 1918 was this organism discovered to be related closely to the organism causing Malta fever. The credit for this dramatic discovery goes to an American, Miss Alice Catherine Evans. Later Dr. Chester S Keefer, at John Hopkins Hospital, was the first to diagnose a case of brucellosis in the United States not traceable to goats.

Brucellosis is primarily a disease of animals Natural infection occurs in horses, fowl, swine, sheep, cattle, goats, and deer Although infected animals may show no evidence of disease, bacteria may be found in their milk and meat Brucella organisms are very resistant and can remain alive in unpasteurized cheese for as long as two months It follows, then, that you can acquire undulant fever, or brucellosis, by drinking infected milk, eating unpasteurized cheese, or eating other dairy products made from unpasteurized milk or cream The disease occurs also among people who are in contact with diseased animals or meat

For the general population raw milk is the usual source of infection. But since most cities require pasteurization, milk spread infection is more common in small communities Brucellosis is extraordinarily prevalent among cattle In some States of America 90 per cent of the dairy herds are infected Infected cows may pass large quantities of germs in their milk

USIS

The main sufferers of Brucellosis are farmers, butchers, and veterinarians—those who have contact with the animals and their meat.

even though they show no evidence of disease. Goats suffering from Malta fever likewise transmit the germs when appearing to be well.

It is fortunate that most people who drink infected milk do not acquire acute brucellosis. But many people who never have had symptoms show immune bodies in their blood. This fact proves that there are many cases of undulant fever unrecognized and unreported. After even mild and unrecognized infection immunity results. Strangely enough the disease is rare among children, in spite of their being heavy milk drinkers.

Brucellosis is an occupational disease in the goat, hog, dairy, and cattle industries. The main sufferers are farmers, butchers, packing house workers, and veterinarians. Farmers acquire the disease from animals. Butchers and packing house workers acquire it from contact with infected animals and infected meat. Veterinarians are often infected when caring for cows that are calving. The disease acquired from cattle is milder than that acquired from goats and hogs. From whatever source, the germs may enter through the skin or be transferred to the mouth or eyes by soiled hands. There is no evidence that brucellosis is spread from man to man, although theoretically it could be.

Brucellosis contracted from goats and pigs is a more severe form than that acquired from cattle, and the bouts of fever come in waves and last longer

Brucellosis, or undulant fever, is classified on the basis of temperature as intermittent, undulant, and malignant forms. The incubation period may vary from five days to several months.

Brucellosis begins gradually with joint pains, aching muscles, back, and head. The patient has a feeling of chilliness without actual chills. He suffers from insomnia, may be constipated, and may lose weight and strength. Inevitably he has fever. At times he may be ill for some time without feeling very sick or weak and uncomfortable or even knowing he has a temperature.

As the disease progresses he has an afternoon and evening fever and more of the cold feeling without actual chills. Commonly he develops a cough and raises small amounts of sputum. The afternoon fever passes off during the night. Then there come drenching sweats, requiring the bed to be changed. When the disease is well established the temperature may be 104° F at night and 100° F in the morning. The fever may last six or seven weeks or even be prolonged into months before slowly leaving. In the disease acquired from goats the bouts of fever may come in waves. This is why it is called undulant fever.

There is a chronic variety of undulant fever with varied symptoms difficult to classify. This form may not incapacitate, and the main symptoms may be only weakness and a low-grade fever.

If you develop suspicious symptoms, particularly if you have a fever (a fact easily determined with a clinical thermometer), you should call your physician and go to bed.

Until recently there was no specific cure for undulant fever. In December, 1948, the results of joint research carried out by the Children's Hospital, Washington, D. C., and the Department of Preventive Medicine, Johns Hopkins University, Baltimore, were published. Experiments were made with a new medicine, and the results were effective. Fever was cut from the usual ten days to an average of two and one third days, a striking proof of the therapeutic properties of the new agent. Furthermore, researchers have developed a vaccine that will help prevent undulant fever. If your occupation exposes you to infection, you should be immunized.

Undulant fever may eventually be a thing of the past, but only when brucellosis has been eradicated from animals.

How Sweet the Tooth?

R. R. STEINMAN, D D S

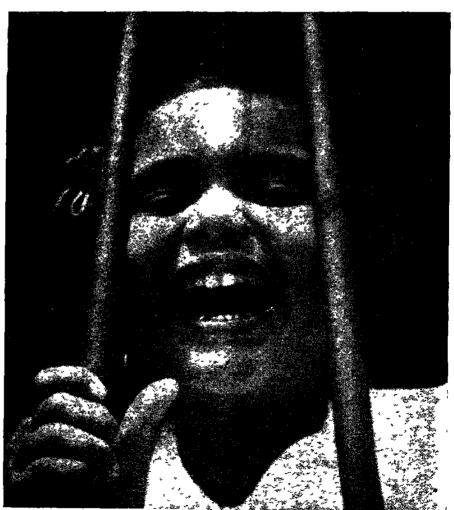
Can you have your cake and your teeth too?

ALMOST everyone enjoys delicious food The enjoyment of food is sometimes measured by its sweetness Could you believe that the dental profession would like to take all the joy out of eating? We have been accused of taking candy out of the mouths of little children No normal person would desire to deprive a child of innocent pleasure, least of all the dentist The dental profession is looked to as the custodian of the health of the mouth If we see children indulging in habits that will injure their teeth, we are neglecting our duty if we remain silent

The selection of food should be given careful thought and due consideration It is sometimes thought that a person may eat anything pleasing to the taste, and the body will pick out only the things it needs Unfortunately this is not true The medical profession claims that over-weight is one of its big problems If the body took only what it needed, there would be no over-weight The body also absorbs more than is desirable when a person takes an over-dose of sleeping pills It is evident that the body does not show an ability always to select and choose in absorbing what is eaten. We must use our intelligence to feed our bodies correctly if we expect the best of health

God has placed within each food many of the elements needed in using that food. Often when man processes a food he removes some of the nutrients in that food originally. In the production of sugar from cane, for example, all the calcium, phosphorus, iron, thiamine, riboflavin, niacin, and other food elements are removed About all that is left of the cane is pure carbohydrate

To continue growing, a child must be given a diet rich in body-building elements. The body must be given the building stones—protein and plenty of minerals

The teeth are composed largely of the minerals calcium and phosphorus Trace elements such as fluorine are necessary If the child is given a substitute for good food, such as large amounts of sweets, he often does not get the proper food

N Ramakrishnan

In order to maintain the steady growth in your child give it a diet rich in body-building elements Substitutes for good food, such as sweets made of refined sugar, cause harm rather than provide nourishment.

elements to make sound teeth. To produce decay-resistant teeth, the body must have an abundance of vitamins, minerals, and trace elements

The number and kind of bacteria in the mouth are influenced by the foods eaten An excess of sugar in the diet will cause an increase in the number of bacteria the doctors call lactobacillus It is capable of producing from sugar lactic acid strong enough to dissolve tooth enamel The more sugar eaten the greater the number of such bacteria and the more acid produced in the mouth Generally the less sugar eaten the fewer the acid-producing bacteria found in the mouth

During World War II it was noticed that children had less decay than before the war A direct relationship was noticed between the amount of sugar imported into a country and the amount of decay the children had During the war there was a 60 per cent reduction of sugar imports for Finland and Norway It is interesting to note that during this reduction of sugar imports there was also a 50 to 60 per cent reduction in the number of teeth affected by decay

There have been many studies through the years on the relationship of an excess of sugar and decayed teeth All these studies pretty well agree that there is a definite relationship between the amount of sugar used and the amount of tooth decay After reviewing all the evidence, the Council on Dental Health of the American Dental Association issued this statement "It is now widely believed that decay of the enamel is caused by acids pro-

duced in the fermentation of sugars For this reason the use of sugar should be restricted, and a considerable reduction in sugar consumption can be achieved by eliminating confections and sweetened beverages from the diet"

Traces of fluorine in the drinking water, whether found there naturally or added artificially, help to reduce the prevalence of decay Fluorine alone is not the complete answer to this problem Dr Hamilton B G Robinson, associate dean of Ohio State University, College of Dentistry, says this, "Fluoridation appears to be a safe and effective method for reducing dental caries [decay] BUT fluoridation is not the whole answer to the problem of tooth decay If the consumption of refined carbohydrates in candy, soft drinks, chewing gum, lozenges, etc , continues to increase, any benefit gained from fluoridation will be lost or masked"

On the average, each person in the United States eats some one hundred pounds of sugar a year This may sound unbelievable But it takes only about twenty-five teaspoons of sugar daily to make one hundred pounds a year

The sugar content of some of the more common foods was shown in the *Iowa Dental Bulletin* for April, 1947, to be as follows

	Teaspoons
Chocolate bar (5c size)	7
Chewing gum (one stick)	½
Jam (one heaping teaspoon)	3
Maple syrup (20 grams)	2½
Honey (one level tablespoon)	3
Angel food cake (1/12 of large cake)	6
Chocolate cake (1/12, 2 layers, icing)	15
Doughnut (3 inch diameter)	4
Brown Betty (½ cup)	9
Ice cream (⅛ quart)	5-6
Apple pie (1/6 medium pie)	12
Cherry pie (1/6 medium pie)	14
Chocolate milk (5 ounces)	6
Cola beverage (6 ounces)	4 1/3
Ginger ale (6 ounces)	3 1/3

By going easy on ultra-sweet foods, you not only save your teeth but also shrink your waistline—an added dividend for eating simple foods

To show how easy it is to get twenty-five teaspoons of sugar in a day, let us suppose that a child adds one teaspoon of sugar to his cereal, has jam on his toast, and puts one teaspoon of sugar on his grapefruit—the breakfast total is five teaspoons At ten o'clock he has a soft drink—four teaspoons added For lunch, chocolate milk —six teaspoons For dinner, apple pie—twelve teaspoons The total for the day is twenty-seven teaspoons of sugar And only twice was sugar added to the food as served, one teaspoon for the cereal and one teaspoon for the grapefruit This does not include the addition of sugar to such foods as canned peas, corn, and peanut butter

There are a number of things that can be done to reduce tooth decay First, provide an abundant supply of foods rich in tooth-building elements The importance of milk and vitamin D in this role is generally recognized Other foods

(Continued on p 20)

On the Trail of Radiant Health—No. 11

FOOD AND YOUR PERSONALITY

WAYNE McFARLAND, M.D

Are you jittery, nervous, easily fatigued and sometimes even cantankerous? It may be that you do not have enough under your belt to keep you fit and happy.

IN PREVIOUS articles we have shown what are some of the basic fundamentals of nutrition. We will now show you the relationship between food, or the lack of food, and your personality—your disposition, if you please

We are going to start with breakfast.

A survey has brought to light that the key meal of the day is being slighted, and we and our children suffer as a result. A good many children do not have a breakfast which is adequate, for it does not contain enough of the protective foods—such as citrus fruits, tomato juice, milk, and eggs.

Without breakfast, the blood sugar may drop to levels low enough to produce headache, gastric disturbances, marked fatigue, and nervous irritability. The lack of co-operation between a child and his lessons, and teacher, may not be a poor mentality and stubbornness at all It may be simply a boy who has not had enough under his belt to keep his disposition under His breakfast was too skimpy

Put with this the fact that breakfast should provide one-fourth to one-third of the day's total supply of essential food nutrients and calories, and you have basis enough for jittery, nervous fatigue, and at times cantankerous youngsters as well as oldsters.

It is no small wonder that, lacking essential vitamins and minerals, we suffer aches, pains, and nervousness, while the child, irritable and puny, catches everything that is around, and has no end of nose, throat, eye, and tooth trouble The popular idea that we can make up the deficit by swallowing one or two vitamin pills, is taking a long chance to remedy something that usually can be corrected at the dining-room table Most of the time it is a lack of practice rather than a lack of knowledge

One of the most interesting fields of nutritional study has been the effect of foods on an individual's mentality and his disposition You will recall that Vitamin B Complex and especially B_1, or thiamin, plays a very important role in maintaining normal, healthy nerves A good percentage of the population do not get adequate amounts of Vitamin B Complex Here is the explanation of much of our tiredness, "nerves," and lack of pep. We are not getting enough Vitamin B Now listen to a scientifically controlled diet which was adequate save for one thing—it did not have enough Vitamin B_1.

AN ENLIGHTENING EXPERIMENT

Drs. Williams and Mason, members of the Mayo Clinic staff, took eleven normal women who were in good health and normally nourished They then placed them on the following diet: plain white bread, corn flakes, potatoes, polished rice, sucrose, skimmed milk, beef, cheese, egg white, butter, vegetable fats, cocoa, gelatin, tinned vegetables, and coffee This closely resembles in many respects the diet of thousands of families. Maybe it sounds like yours. But one thing, and only one,

was at a low level—Vitamin B_1 (thiamine chloride), the vitamin essential to smooth-running nerves.

Here is what happened After several weeks marked changes occurred in the behaviour of the women. These previously normal women became depressed, irritable, quarrelsome, and fearful They all became weak, lacked energy, and were unable to carry on their tasks efficiently. Then to add to this sad mental state a variety of other symptoms appeared, such as headache, backache, sore muscles, gastric distress after meals, sleeplessness, tenseness, prickly sensations of the skin, intolerance to noise. "In short a group of women specially selected for their co-operative qualities and their previously normal behaviour, were transformed in a few weeks into inadequate, suffering creatures with all the features usually associated with the 'neurotic' personality"

And all this because they lacked enough Vitamin B_1 in their diet

Intolerance to Noise

I want you to notice just one of the symptoms these women complained of, and its consequences Did you notice the symptom "intolerance to noise"? Let's enact just what this could mean in a typical home

It's late afternoon, just about time for Edward to come home Bang! goes the front door Yes Edward is home, and he shouts, "Oh, Mummie! Look at this I got 100 per cent for my spelling today!"

"Sonny, stop that shouting—now do go outside and play—I can't stand all this noise. Now go on out." And Mother holds on to her head and frowns as though it would blow to pieces if she heard another word from Edward.

So he turns and walks out, wondering what is wrong with Mummie, he thought she would be glad.

I'll tell you what's wrong with Mother She is feeding herself and family so that they are nervous, highly-strung, and irritable Instead of throwing her arms around Edward with a great big hug and kiss, and congratulating him on his progress, she sends him out; and he, instead of feeling a "mother's love" feels the effects of "intolerance to noise"

What many a home needs is not more prayers by the preacher to keep them from squabbling, bickering, and fidgeting That prayer is to be answered at the dining-table The devil knows that as long as he can have people eat improperly, so that they don't get enough vitamins to run a nervous system, he can easily victimize them They cannot control their dispositions until they learn to control their diet Good religion and good health are inseparable

Another Important Factor

Another great cause for this lack of Vitamin B is the over-indulgence in sweets and sugars from childhood up. Vitamin B_1 is required to use the sugar properly in the body If one is not obtaining enough protective foods by eating an abundance of whole-grain cereals; fresh vegetables, and fruits, he will lack in Vitamin B Complex Or even if he should get enough Vitamin B Complex in foods, but uses it up in the process of digesting a lot of sweets, biscuits, pastries, and ice-cream, he would still have little left for properly running his nervous system

"Sugar as consumed in recent years, whether it originates from sugar cane or sugar beets, is for the

most part highly refined sucrose What vitamins or minerals may have been present in the cane or in the beets are almost completely removed . .

"Indiscriminate and uncontrolled supply of poor food for between-meal eating cannot be condoned with impunity anywhere

"Physicians presumably will continue to advise against the use of sugar between meals Such advice should logically apply to the consumption of sweetened beverages as well as to the use of candy" —*The Journal of the American Medical Association,* November 7, 1942, pages 763, 765

So watch your sweet consumption It is the excessive use of sugar that robs us of Vitamin B_1, clogs the human machine, and keeps us nervous and below par. Remember that your diet and your disposition are very closely related. Let us follow the Bible injunction that "Whether therefore ye eat, or drink, or whatsoever ye do, do all to the glory of God" 1 Corinthians 10·31

OFFICE ACHES and PAINS

MAXINE BLOCK

Don't sit hunched over your desk all day, or your muscles may tighten up in protest

Do you experience a feeling of stiffness and a dull nagging ache along the back of your neck and shoulder-blades and down your back? Your tightened muscles may need relaxation.

"WHEN patients come to me complaining of stiffness and a dull, nagging ache along the back of the neck and shoulder blades, I can be pretty certain that they are sedentary office workers," a well-known Los Angeles physician told me. "I'd say that seventy-five out of every hundred office workers feel some pain at the base of the skull and between the shoulder blades that is most severe by the end of the day.

"Just this morning an unhappy accountant explained to me, 'It hurts right along the shoulder blades, Doctor. I don't know why, because I don't do any hard work—only sit at a desk all day long.'

"What he didn't realize was that just because he sat at a desk with head bent and protruding like a turtle's and back hunched forward he was abusing his muscles, and the poor wrenched and strained things were responding with a cry of alarm. It's a needless ache, the the result of our modern-day tension, which dogs an office worker during the day and accumulates so that by the time he is homeward bound he has a pain in the neck and a headache as well.

"The housewife hanging up clothes, cleaning windows, and scrubbing floors isn't likely to get it, the farmer pitching hay onto a cart isn't either. But the typist and her boss are frequent complainers. With them it's an occupational pain, brought on by continuous straining of muscles and bad head posture that checks the blood supply to the brain. Learning to relax nervous tension, changing faulty habits of work and posture, giving weary muscles special relaxing and strengthening exercises—these simple procedures will rid the switchboard operator, the typist, the book-keeper, the business executive, the artist, and the architect of neck and shoulder-blade aches."

Doctors know that when the muscles work in perfect balance no muscular tension can develop. How, then, does life become a pain in the neck? Let's just take a day in the life of a perennial Acher. You sit at the breakfast table, sit in auto or bus getting to work; sit eight hours at your desk, sit on the return trip home, and then spend the evening sitting, reading, or visiting friends. You don't get a change of occupation even at night.

Add poorly designed chairs, bad habits of posture, weakened neck and shoulder muscles that make it impossible to support the head in proper position, and what do you have? Fatigue, aches, and a dragged-out feeling far earlier in the day than necessary.

The truth is that nature never intended us to remain in a sitting

position fifteen hours of the day. Instead, she planned for us to run, climb, walk, use *all* our muscles instead of singling out a few and over-working them

In order to bring home that weekly pay envelope the office worker spends his days resting on his haunches, with fingers bent clasping pencil or papers, upper arms practically glued to the body Tension, like a vise, pinches his blood vessels—his spine in abnormal contortions, his head protruding, his shoulders hunched under his ears, his elbows on the desk, or his chin sagging on his hand

How often during the day do you have the chance at a free-swinging motion of the hands and upper arms out and away from the body? Never? Is it any wonder, then, that you are moaning with shoulder, neck, and head aches?

The culprit, the muscle where *most of this pain starts, is the* trapezius—a large flat muscle extending from the back of the head to the middle of the back and out to the shoulder tips If you recall your high school geometry you'll know that it takes its name from the odd-shaped trapezium The trapezius, main muscular support of the upper back, is attached to the back of the skull just above the hairline and also to all portions of the top of the head above the level of the eyebrows

"The head," says Dr Barclay E Noble, "is quite heavy and is supported well back of its point of balance so that the trapezius muscle must be tense at all times to hold it erect In any position in which the body or head is tilted forward, the strain on the trapezius is increased When the eyes are used for close work the trapezius muscle must hold the head rigidly in the position that gives the least muscle strain to the eye muscles Thus nervous tension, producing muscle tension, is the most common cause

of trapezius pain Draughts, infections, bruising, jerking of the head as in an auto accident (sometimes causing hæmorrhage into the muscle), and regional arthritis are other causes of pain All except the acute phase of arthritis are benefited by simple home treatments—exercise, heat, relaxation, massage, and correction of faulty posture"

Doctors know that shoulder and neck aches can be caused by habitual misuse and abuse of muscles They can also be mentally induced, starting in the deep recesses of the mind, but expressed in real; physical pain Most of us have been victims of psychological fatigue and aches

Bill Smith comes home from work tired, ready to spend the evening curled up with his favourite book

"Aren't you going to get dressed?" asks Mrs Smith "You know we promised to visit the Wilsons."

"The Wilsons!" screams Bill "Not tonight." He wants to relax, not go calling Immediately he is conscious of an ache right between the shoulder blades

In the same way the typist happily notes that the clock hands point to five The boss enters with a rush overtime typing job And the back of her neck begins to throb

If Bill were allowed an evening to himself and the typist invited to a concert, their aches would not materialize

For real physical pain medical experts have worked out a programme that will bring relief to the sedentary worker They stress, however, that if you are suffering from serious tension, the result of years of faulty habits, it is unreasonable to expect miraculous immediate results But by following these suggestions you will in time find lasting relief from shoulder and neck aches

1 *Posture* If your bathroom mirror shows that your posture resembles a candle in a sunny window, you may be certain you

Correct posture and a little relaxation now and then during the day will help to keep away those discomfiting pains

are walking and sitting with a built-in slouch.

How do you go about giving yourself an instinctive feeling for proper body alignment? Stand with your back to the wall and straighten out your spine until it hugs the wall You'll feel a strong pull along your spine and up through your neck Hold that position a few seconds, and you'll remain conscious of the sensation as you walk away and as you sit down Try it again and again at home and at the office Do it many times After a while it will become automatic If you feel as if something were pulling your neck up, you will know how weak your muscles have become

Now for sitting Keep your body upright, your head erect, your feet planted firmly on the floor Push your hips as far back as they will go Bend forward from the waist Don't hunch shoulders when you place your arms on your desk

Try for relaxation Be aware of the way you hold your pencil Do you grip it tight enough to support a crowbar? Learn to hold it lightly

Next study your chair Does it give support to the small of your back? Is the seat too high for your short legs or too low for your long legs? Adjust it until it gives you full support.

"Faulty posture leading to pain must be studied, searching for positions in which the head is bent forward on the body," says Dr Noble. If pain is worse on awaking, pad under the mattress so that for its full width it slants up evenly from the hip area to the top (about four inches) and use only a very small pillow If the pain follows work at a desk, adjust the desk level until the head is not bent forward

"The plane of the face will always become almost parallel with the surface studied, since the eye muscles are most relaxed when looking straight forward."

2. *Heat, Relaxation, and*

Massage "Heat," explains Dr Noble, "is almost always soothing to a painful muscle, and always helps remove toxic products by increasing circulation The trapezius muscle is most relaxed when lying on a flat firm surface, so that the shoulders and the head are in a straight line with the body or fall a little back on this line, because of support along the spine, most easily provided by a soft rolled towel

"Heat and relaxation can often be combined The most tender spots on the skull should be gently massaged by pressure with the ball of the thumb or the finger tips placed flat and rotating the muscle or ligaments against the bone The body of the muscle can be massaged between the thumb and fingers Liniments are beneficial because they act as counter-irritants and aid circulation"

3 *Exercises* If you've been suffering from "a toothache in your shoulder blades" you'll find that simple exercises will bring relief Exercising neck and shoulders increases the circulation and carries off toxic products.

That healthy-baby instinct—stretching—is one of the best exercises, and you can do it while at work

If your work is concentrated desk work, try standing while you use the telephone A visit to the water cooler relieves tension Try to relax during each break in your work Let your arms hang down completely limp. Shake them Drop your head forward and bob it up and down

One of the best shoulder exercises is simple—force the shoulders as high up as they will go, then down, forward, backward, and rotate so that the largest possible circle is made by the tip of the shoulder.

Another exercise for flexibility of stiff shoulder blades is the simple arm swing. Inhale and swing your arms forward, up, back, and down. Then swing them back and up in a circle.

"The final step in relieving trapezius headaches lies in stretching the muscles and ligaments attached to the skull," says Dr Noble "This must be done gently by moving the head from side to side, forward and backward and rotating, thus one contracting muscle stretches the opposite muscle

"The greatest relief is obtained by having someone else place one hand under the chin and one under the back of the head (patient lying so that head extends off the side of a bed), pulling gently on the head, and going through the above motions This can also be done independently by use of a muscle stretching device"

Why don't you say good-bye forever to aches and pains from tension? Aren't a few moments of relaxing each day worth the trouble to you? Space out your work with relaxing, and you can do more work with less strain on you. Try it today!

HOW SWEET THE TOOTH

(Continued from p 15)

may add their part, such as fruits, green leafy vegetables, whole grains, nuts, and legumes

Second, cut to the absolute minimum the amount of sugar used in the diet The reduction of sugar will help to reduce the number of acid-producing bacteria in the mouth. The body requirements for sugar are adequately met by eating plenty of fruits and vegetables, which naturally contain

sugar plus other important food elements.

Third, brushing the teeth after each meal will help reduce the number of bacteria in the mouth. If little food is left in the mouth, bacteria will not thrive. Many tooth pastes promise wonderful results To date, the anti-decay properties of any tooth cleanser have not been established by controlled clinical studies of human population groups.

With such a programme, your dental bills should be so small you will hardly notice them In fact, if everyone followed this advice the dental profession would suffer a major depression, but to date there is no indication that the profession need worry.

HOMEMAKERS' HELPS

RECIPES

Mock Chicken Soup

Two eggs; 3 tablespoonfuls butter; 1 pint potato water, celery salt, parsley, onion; ½ cup hot cream

Scramble the eggs in butter, add potato water and boil 10 minutes Flavour with celery salt parsley the onion Add hot cream and serve About 4 servings

Cream of Lima Bean Soup

One cup Lima beans, 1 cup chopped carrots, 1 tablespoonful flour; 1 chopped onion, 2 cups milk, Vegex or Marmite if desired.

Soak Lima beans overnight in 3 cups cold water Drain and cook in 3 cups water At the end of 15 minutes add the chopped onion and carrots, and cook until beans are tender Put through a sieve and add to white sauce made of flour milk, Vegex and 1 cup water Makes 4 to 6 servings

Lentil Patties

Two cups puree; 3 tablespoonfuls chopped onion; ½ cup chopped walnuts, 2 tablespoonfuls shortening; 1 teaspoonful salt

Brown the onion in the shortening, then mix all the ingredients, and form into patties Place on an oiled pan, and brown in the oven Serve with gravy or tomato sauce

Stuffed Squash

One cup boiled rice; 1 onion minced fine; 3 tablespoonfuls minced parsley or green coriander leaves; 2 eggs well beaten; salt to taste; one medium squash.

Wash squash and boil until nearly tender. Let cool, cut in halves and remove seeds. Fill each half with the above mixture. After squash is filled place in oven to bake for half an hour or until done

Mixed Vegetable Curry

One cup peas (about 1 lb fresh garden peas) shelled; ½ lb. string beans cut fine; 2 carrots cut in small pieces; 2 tomatoes skinned and cut fine; 2 potatoes quartered, ½ coconut; 1 bunch green coriander leaves; 1 small piece saffron (haldi); 1 small piece ginger; 1 tablespoonful coriander seed; salt.

Put the carrots in boiling water and boil ten minutes Add the other vegetables and boil till nearly tender Grind the spices and the coconut (separately) Take a tablespoonful of ghee or shortening, put in a stewpan and add to this a minced onion Let fry a little Add the ground spices and fry a little longer Now add the cooked vegetables, the coriander leaves and the coconut Let this boil together for fifteen minutes over a slow fire taking care it does not scorch Serve with boiled rice or with purries

Sweet Potato Purries

One cup mashed sweet potatoes; 1½ cups ata; salt; ghee or shortening for deep frying.

Mix the ata and the sweet potatoes with salt to taste until the dough can be rolled out easily Divide into twelve equal parts Roll out thin Drop each purrie in hot boiling oil and fry until very light brown Ordinary potatoes will also be good for these purries

Feather-weight Sponge Cake

Three eggs (separated); ¼ teaspoonful salt; 4 ozs. sugar; 1 oz. plain flour; 3 ozs. wheat cornflour (or use all plain flour); 2½ oz. milk.

Put egg whites into a large basin (3 pint size), sprinkle with salt, and stand in boiling water 1-2 inches deep, poured into a larger dish

Beat whites rapidly with rotary beater until very stiff Add yolks separately, beating until very thick Gradually add sugar at the side of the basin, beating until dissolved Remove from water, beat rapidly until batter piles stiffly as it runs from the beater The batter should now measure 2¼ pints, and the total beating is about 10 minutes

Sift flour four times, lightly fold in a third at a time, using down-up-and over movement with flat wire beater inserted down the side of the basin Do not stir Boil milk, pour over batter, and stir in lightly and evenly Bake in two well greased and floured 8-inch tins in moderate oven (425°F electric 375°F gas) 25 minutes The cakes rise to the top of the tins

When cold fill with lemon filling

Lemon Filling

One and a half tablespoonfuls (⅜ oz) cornflour; ⅜ cup (3 ozs.) lemon juice; ⅛ cup (1 oz.) water; ½ cup sugar; 2 teaspoonfuls grated lemon rind; 1 beaten egg yolk.

Combine all except yolk, stir continually over low heat, then boil 2 minutes Stir in yolk, draw aside to cook, use for sponge filling

Walnut Cocoa Drops

One and a half cups sugar; ½ cup shortening; 2 eggs; ½ teaspoonful vanilla; 2 tablespoonfuls cocoa; 2 cups flour; ½ cup chopped walnuts.

Cream sugar and shortening Add well beaten eggs, then vanilla Sift cocoa with flour, add gradually to first mixture Fold in walnuts Drop with a teaspoon onto cooky sheet Flatten slightly Bake at 350°F. When cool, fasten cookies together in pairs with powdered-sugar frosting About 24 cookies

KIDDIES' KORNER

THE TWO CAROLINES

ARTHUR S. MAXWELL

CAROLINE HERMAN was a very nice little girl in many ways. She had pretty hair and a pretty little face, and when she was all dressed for school in her navy-blue uniform, you would have thought, to look at her, that there wasn't a nicer little girl in all the world.

But there were two Carolines. One was the home Caroline and the other was the school Caroline. The home Caroline was left on the doorstep every morning, and picked up every dinner-time when the school Caroline came back.

Now, the home Caroline was a cross, pouty, grumbly, growly, and disobedient Caroline, quite unlike the Caroline that everybody saw outside and thought was such a nice little girl.

Mother was worried almost to tears over her two Carolines. What could she do? She thought it over, and devised a plan.

Now, Caroline loved her school-teacher very much. Indeed, by the way she acted, it seemed as if she loved her teacher more than she did even her own Mother. She would take flowers and other pretty things to her to show her affection, and of course teacher, seeing only the school Caroline, thought she must always be a very good girl indeed.

One day the school Caroline came home and changed suddenly on the doorstep, as usual, into the home Caroline. Mother called to her as she came in,

"Will you please go round to the market and buy me some vegetables?"

"No, don't want to, I'm tired," snapped the home Caroline. However, she finally decided to go under protest.

While she was gone, a visitor came to see Mrs. Herman, and being shown into the living room, sat down in a corner out of sight.

Caroline returned.

"Here are your old things," she said, throwing them down on the floor. "Now I'm going out to play."

"But Mother's tired, wouldn't you like to help her finish her work?"

"No, I don't want to."

"Well, please lay the table for dinner."

"Don't want to."

"But you must do something to help Mamma. Please lay the table, Caroline."

"Oh, I hate laying the table," said Caroline, slamming the door, and putting on a pout that would almost frighten anyone. Pulling out the table-cloth from the drawer with many grumblings, she spread it out in a rough-and-tumble sort of way. Then she brought out the knives and forks, scattered them among a few dishes, and prepared to walk off.

Mother looked displeased, but did not say anything until Caroline was about to go. Then she said, "Caroline, we are to have a visitor to dinner tonight. In fact, you might call her in now, she's in the living room."

Caroline's face paled. Looking around, she noticed that the living-room door was open.

"But, Mother dear"—her tone had suddenly altered—"the table is not set for visitors."

"No, but it is set for Mother."

"But, Mother, I would like to arrange it better."

"It is too late now. We must not keep our visitor waiting. Please call her in."

Very pale, and trembling a little, Caroline went into the living room.

"Mother says, Will you please ..." She stopped. It was her teacher!

"O teacher, have you heard all I have been saying? Oh, dear, dear, dear!" cried Caroline, bursting into tears.

"I am sorry my little Caroline is not the same at home as she is at school," said the teacher.

"Oh, I'm so sorry!" wept Caroline. "I won't ever be so naughty again."

And really, to tell the truth, she never was, for always after that she could never feel quite sure that there was not someone listening to her in the next room.

SIMPLE TREATMENTS

(Continued from p 11)

chest Apply No 2 similarly, being careful that it fully covers and laps over No 1 an inch or so on all edges

Revulsive Hot and Cold to Head

This treatment is adapted to all kinds of headache, sinusitis, cold in head, and catarrh

Small fomentations are applied to forehead simultaneously with cold compress wrung out of ice water to back of neck After two minutes apply fomentation to back of neck and cold compress to the forehead Repeat this double procedure three times Additional relief may be experienced by a hot foot bath administered at the same time Always finish treatment by cold sponging to forehead and neck and a dash of cold water to the feet, if a hot foot bath has been given

The Enema

Even a brief presentation of water treatment would be incomplete without a description of the enema

An enema, properly administered, is one of the most effectual means that can be used for emptying the colon and cleansing it of offensive contents Laxatives, cathartics, and mineral oils never fully cleanse the colon, but in most cases only render the contents liquid, thus increasing rather than lessening the tendency to absorption of toxic material

Technique· Equipment used A two-quart enema can with rubber tube four feet long, with shut-off, and a glass or rubber tube two and a half inches long inserted into end of rubber tubing for inserting into the rectum.

Posture: Lie on back with pillow under buttocks Relax perfectly, knees drawn up

The heat compress This is similar to the moist abdominal bandage, but smaller. It is wrapped around the neck, with a double thickness across the front and a single thickness elsewhere

Water Two quarts of water for an adult, preferably at temperature of 90° to 95° F Water as warm as 110° may be used if there is griping previous to treatment

Insert enema tip two inches Allow water to flow in gradually, until griping seems to make it impossible to retain water longer Do not pass the water Hold it until this griping sensation passes off Allow more water to enter colon Griping may occur two or more times, do not give up, but persist in the treatment Soon the entire two quarts will have been taken in gradually with little further discomfort save moderate distension

Withdraw tip, and lie quietly relaxed for five to ten minutes Gently massage the abdomen with both hands, alternately pressing one side, then the other With gentle exertion, press the lower right abdomen over region of appendix, moving pressure gradually upward toward the liver to the ribs, across the abdomen to left side, then down left side to pelvic brim. Repeat several times. These movements will bring the water into contact with the entire mucous membrane of the colon, thus loosening all contents from the intestinal wall and dissolving it, so that it may be removed. Take plenty of time to expel all the water and fæcal contents. Do not strain

With thousands of enemas thus given before and after administration of bismuth X-ray enemas, it has been demonstrated that the whole colon may thus be entirely cleansed of all contents

Repeated, habitual enemas are not desirable, but an occasional colon bath is as beneficial to the colon as a bath to any other part of the body

Water Drinking

Another procedure of great benefit in overcoming constipation is the regular systematic drinking of water Eight or ten glasses (two quarts) of water should be drunk by adults every day Begin early in the morning by taking three glasses of tepid water a half hour before breakfast This effectually cleanses the stomach and passes on into the intestines, thus starting the action of the intestines, which usually causes a copious evacuation of the bowels soon after breakfast Tepid water is more effectual than either hot or cold, for the reason that it is somewhat nauseating, and this same nausea imparts additional stimulus to the intestines

Do not start rashly tomorrow morning upon this programme, but begin gradually, taking one glass the first morning, then increasing a half glass a day until in a week you will be taking the three glasses with impunity and even with relish Take two or three glasses later in the day between meals, altogether nine or ten a day This is good for more than merely to relieve constipation. It flushes the system, reduces acidity, removes toxic substances from the system, and cleanses the tissues generally.

Refreshes you while it does you good!

Eno is a mild but surprisingly efficient antacid—never causes an upset, but gives quick, positive relief from acid indigestion, flatulence and heartburn.

That's because of Eno's special buffering antacid action. When someone overeats —or eats something that doesn't "agree"—Eno helps to put things right again.

And Eno is so exhilarating and refreshing to drink! In 8 seconds it makes you *feel* better. Not just your stomach, your mouth too! Always keep Eno's "Fruit Salt" handy.

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Large bottle Rs. 3/12
Small bottle Rs. 2/6
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—ENO. 1096

1 This question and answer service is free only to regular subscribers

2 No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases

3 All questions must be addressed to The Doctor Says Correspondence personally with the doctor is not available through this service

4 Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES Answers cannot be expected under ONE MONTH

5 Questions sent in on Post Cards will not receive attention

6 Make questions short and to the point Type them or write them very clearly

7 Questions and answers will be published if they are of such a nature as to be of general interest and without objection but no names will be published Address The Doctor Says Oriental Watchman and Herald of Health P O Box 35 Poona 1

?

COLD MITTEN FRICTION Ques —"Your article entitled 'Cold Mitten Friction' in the May issue was very interesting However, there is one doubt in my mind Should a mitten friction be taken after or before the bath Or should a bath not be taken when a cold mitten friction is taken?"

Ans —Cold mitten friction should be taken immediately after a bath

?

TUBERCULOSIS Ques 'If one were living with or frequently contacting a person having tuberculosis, what signs would indicate that the disease had been acquired?"

Ans - Active tuberculosis can usually be detected by a study of the patient's symptoms a physical examination or an X ray of the chest There is danger in living with a person who has active tuberculosis, for the organisms may readily be breathed in and start infection in the second person Many persons who live to adult life and appear to be in health have had tuberculosis, the infection becoming walled off with scar tissue and mineral deposits

A daily temperature loss of weight, coughing weakness and lessening of appetite are common symptoms in progressive tuberculosis

If one is forced to live in contact with tuberculosis he should plan for frequent checks by a competent physician

?

SUITABLE CHAIRS Ques —"Kindly let me know the correct size of a comfortable chair and desk and the correct lighting for good eye care"

Ans —It is best to sit in a comfortable chair with the back fitted slightly backwards and with light coming over the right shoulder shining upon the reading material It should not shine in the eyes or be placed in such a position as to produce a glare when reflected from the paper The desk should be high enough so that the book placed upon it can be read easily without having to sit in an unnatural position to do so.

?

BELCHING: Ques.—"When I belch about two or three hours after meals I feel I am filled with wind Kindly let me know what it is due to and what should I do to get rid of it'

Ans —Belching is a way to release gases from the stomach The cause is usually nothing more or less than air swallowed when eating too fast, or sometimes as a result of a habit a person may acquire Watch yourself closely to determine if you are an air swallower The cure is to refrain from this practice

?

LACK OF VITAMIN B Ques —'My doctor informs me that I lack vitamin B and that this should be taken in my daily diet Kindly let me know in what foods this may be found I am a vegetarian"

Ans —The B Complex vitamins are a water soluble group A great number of different ones have been isolated and identified They perform very important functions in the human body and are essential for health If one partakes of a well-balanced diet of natural food stuffs, he should receive sufficient B Complex The most common deficiency is that of Thiamine or B_1 This vitamin is found in such food stuffs as whole grains, nuts, yeast and many vegetables The polishing of rice eliminates B_1 and hence is undesirable If rice is boiled *before polishing, the B vitamins saturate the entire kernel. It is best to use unpolished or country rice. This in itself ensures for most people who eat rice in India, sufficient B Complex*

?

FALLING HAIR Ques —"Ever since I took a course of 15 Penicillin injections and 6 Pam injections to purify my blood my hair has been falling I am now taking B Complex tablets, but my hair still continues to fall Kindly suggest some remedy"

Ans —Falling hair is not recognized as resulting from taking Penicillin injections There are several types of conditions resulting in the falling of hair, the most common being "premature Alopecia" due to a large degree to hereditary tendencies Sometimes hair falls out following a severe fever and occasionally in small areas due to certain other dieases I would suggest the following programme in an attempt to control the condition

1 Wash the hair twice a week with a mild soap Massage the scalp each night with the fingers lifting the skin and massaging it well over the entire scalp

2 In using a comb be sure that it is in good condition and that it does not injure the scalp

?

ALMOND OIL Ques —"Kindly give me the details on vitamin contents in almond oil and its uses"

Ans —I do not have access to data on the vitamin content of almond oil Almonds are one of the most nutritious and most easily digested of the nuts, containing 19% protein, 54% fat, 20% carbohydrates, 3% fibre, and the rest water, etc The mineral content is as follows Calcium 0 239, Phosphorus 0 465, Iron 1 0039 This is in grams % The vitamin A content which is the only fat soluble vitamin and the only one which might be retained in almond oil is 580 international units per 100 grams of whole nut Thiamine 120-240 micrograms, Riboflavine 600 micrograms and Nyacin 1 8 milligrams

Almond oil would not contain anything else aside from Vitamin A, and hence I do not believe that in itself it would have any outstanding values You possibly could receive further information from the Institute of Nutrition at Coonoor

TWITCHING EYELIDS Ques — "I am a youth of twenty-one years of age. My left eyelid twitches, especially when I open my mouth or chew anything Please suggest some treatment."

Ans —This condition is probably a tic that is due to nervousness If you concentrate on the problem, you can probably break the habit But unless you eliminate the basic cause of the nervousness, you may develop a nervous habit pattern some place else

?

STIFF NECK Ques —"I have suffered with a stiff neck for the past ten years I have been under the care of many able doctors but have not found relief Kindly advise me as to what treatment I should follow"

Ans —Without examining you, it is quite impossible to determine whether your stiff neck could be successfully treated or not It depends on the cause, whether it is due to muscle

spasm, ankylosis of the bones of the neck or something else Physical therapy is effective in some cases while others require surgery, and some are not treatable at all

?

WEEPING ECZEMA Ques — "My husband has weeping eczema What sort of a diet should he be on, and what treatment would you advise?"

Ans In cases of eczema the diet should be simple We ordinarily recommend the exclusion of meat, fish cakes, pastries (excess sugar in any form), spices vinegar mustard, et cetera Water should be taken freely between meals A great deal of comfort can be derived from taking neutral baths (water slightly below body temperature) for 30 minutes once daily Corn oil (maizola) may be applied following the bath and during the day whenever necessary A bland ointment such as Lassar's paste without salicylic acid may be applied at night Emotional factors are quite important so there must be freedom from worry and anxiety Rest should be adequate Hospital treatment is required in severe cases

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HIVES

(Continued from p 7)

your family However, perhaps you do inherit a tendency to become hyper-sensitive, which would account for the family trend This tendency and the subsequent development of over-sensitivity comprise the question that medical science has yet to answer the big WHY?

The best way in general to combat hives is not to combat it at all, but rather to retire from the battle entirely If you know what is causing your hives avoid it, whether it is berries, blossoms, or bees If you don't know the cause, let your doctor help you find the culprit and eliminate it

---

BAN PAN!

(Continued from p 5)

the grave risks they run in indulging in this filthy and harmful practice, and to introduce legislation that will completely ban the the cultivation and use of pan

We were interested to learn recently that the Madras Government had been disturbed by the indiscriminate casting of betel juice in, on and around the buildings of the Madras Secretariat and in an attempt to prevent the betel spitters from further disfiguring the buildings had ordered the closure of all pan-supari shops in the Secretariat permises and had even required the members of the Legislative Assembly to set the right example to the Secretariat employees by refraining from chewing betel in the Assembly Hall

We feel that it is not enough for our patriotic leaders to feel concern for the preservation of our public buildings but that if they want our nation to be the leaders in this competitive world, they should do all in their power to correct the health habits and maintain the health of our people at a very high level

The ban on the use and sale of all intoxicating beverages has been a great blessing and a boon to those who were enslaved and ensnared in the vice-like clutches of the demon ALCOHOL, and similar legislation in the case of pan can only result in alleviating the suffering of thousands who are on their way to certain death from *buccal carcinoma*

The peoples of our land are just as progressive and ready to benefit by new knowledge and facts as in any other country, and our greatest need in this age of enlightenment and progress is public-spirited citizens in every village and township who will inaugurate Ban Pan Societies to bring the stark truth of the evil results of the continued use of pan to the thousands in every part of the country who chewed and are chewing the betel quid through custom and habit, completely unaware of its insidious threat to their health and longevity

P A T. C L

"What you are born is God's gift to you;
What you make of yourself is your gift to God."

* * *

" 'Tis not so bad a world
As some would make it
But whether good or whether bad
Depends on how you take it."

* * *

"You have to get behind your work to get ahead, and use your head to keep from getting behind."

—Walton

* * *

"If you want a thing done, ask a busy man to do it. The others have no time."

—Elbert Hubbard

* * *

FIVE THINGS TO WATCH

"In the trend of human life,
Five things observe with care:
Of whom we speak,
To whom we speak,
And how, and when, and where."

* * *

"Reputation is what folks think you are. Personality is what you seem to be Character is what you really are."

—Longfellow

* * *

"The only man who never makes a mistake is the man who never does anything."

—Theodore Roosevelt

DIET IN PREGNANCY

(Continued from p 9)

A and D, plus calcium, phosphorus, and iron, 8,095 pregnant women from the same area were controls All other conditions were similar, the only difference was in the food supplements

The group receiving the Vegex-like product showed a significant reduction in the number of still births and deaths of babies under one month of age There was some reduction in the group receiving vitamin A and D supplements and minerals, but it was not significant.

Because of the large number of mothers involved in this study, the lower incidence of still births and deaths during the new-born period

n the supplemented group was ignificant beyond any reasonable loubt.

It is still questionable how much nfluence the nutritional state of he mother has on congenital lefects in the infant. All indications are that a definite relationship xists during the early weeks of pregnancy To avoid bad effects it would be necessary to improve the nutritional state of women before and during the early weeks of pregnancy

Dr. Kirkwood confirms this opinion "It seems very probable hat the results of nutritional difficulties or dietary defects early in pregnancy will depend in large neasure upon the nutritional state of the mother when pregnancy begins It may even be that dietary advice given at the time pre-natal are usually begins, will in some nstances prove to be ineffective, or most congenital defects have arly embryonic origin At least the pre-conception diet should be carefully reviewed at the first pre-natal visit and the woman's nutritional state should be assessed"

The idea of restricting the diet o have a small baby and an easy delivery is heartily disapproved by Dr Kirkwood He says, "The idea of under-feeding a normal woman n order to produce a small baby and thereby improve its prospects s certainly not justified We are now certain that the fœtus may be a parasite upon the mother only o a certain extent To what extent s determined by the mother's own nutritional state at the time she nters pregnancy and by the quality and quantity of her diet after hat"

Frequently a woman enters pregnancy below her ideal normal weight The doctor should give special attention to this fact, and hould allow her to gain during pregnancy about twenty-five pounds above her ideal weight. Otherwise, her own body tissues tend to utilize food at the expense of her un-born child

Burke and Arnell say that the protein content of the diet during the latter months of pregnancy should average seventy-five grams daily A protein content lower than this results in an infant who will tend to be short, light in weight, and low in other measurements The birth length and protein certainly are proportionate

5 There is significant relationship between the development of the infant's bones and teeth and the mother's general diet, according to Dieckman and his co-workers. The amount of protein she eats is especially influential

When women were on diets rich in protein, 57 per cent of their infants were advanced and 14 per cent were retarded in bone development When the maternal diet was very inadequate in protein, none of the infants were advanced, and 71 per cent were retarded.

When bone and tooth development were compared with the amount of calcium in the pre-natal diets, the scientists still found a striking relationship

6 Liu says that vitamin D is more important than calcium intake in determining the extent of retention of calcium if the diet includes a reasonable amount of calcium

7 H Berk studied the case histories of 198 five-year-old children at the Forsyth Dental Infirmary He found that one of the chief causes of tooth decay in five-year-olds is that their mothers did not drink enough milk before the babies were born

Berk says that there is a very significant relationship between the calcium intake of the mother during the latter part of pregnancy and the amount of decay in the child's first teeth

Scientists believe that a pre-natal diet allowing a liberal storage of calcium and phosphorus in the infant's body at birth is essential to the proper hardening of the teeth during the first ten months of life At three months of age, the child no longer has any of the minerals in his body that were there when he was born

It is a generally accepted fact that hæmoglobin level is affected by diet McCause found a steady fall in the hæmoglobin levels of pregnant women grouped by income level, from an average of 90 per cent in the highest to an average of 71 per cent in the lowest income group The first group had an average daily intake

of fifteen milligrams of iron and fifty-five grams of protein, the lowest income group, nine milligrams of iron and twenty-eight grams of protein

Because women may be low in hæmoglobin at the beginning of pregnancy, it is best that a check on hæmoglobin levels and red cell count be required routinely in pre-natal care

In regions where goiter is endemic, iodine should always be included in the diet as iodized salt

The exact relationship of vitamins to pregnancy is not known But the amounts allowed by the National Research Council in pregnant diets have proved to be adequate. Since there is some danger of lowered vitamin A value in the last three months of pregnancy, the mother-to-be should take concentrates of vitamin A

The information available now indicates that thiamine requirements are increased three times in the latter part of pregnancy Vitamin C requirement is also greatly increased during the latter part of pregnancy

We do not have complete evidence as to the exact value in the pregnant woman's diet of vitamins D, E, and K

By this collective evidence we know that a good diet during pregnancy reduces complications during pregnancy and contributes to a shorter, safer delivery In addition to that fact, it indicates that many pregnant women are on diets that do not carry enough protection for themselves

In view of the vital relationship between nutrition and pregnancy, Burke suggests the following objectives for women

1 Improve the dietary habits of all in the child-bearing age This is essential if women are to enter pregnancy in good nutritional state

2 Provide for all early in pregnancy a supply of effective and practical instruction about nutrition during pregnancy and the foods needed to meet their requirements

3 Provide nutrition instruction throughout the lactation period, in order that the nursing mother will take the additional foods required

4 Provide corrective nutrition teaching in the home

If we realize the importance of these objectives, we will lend our support to a programme that will make nutrition information and public health service available to every woman of child-bearing age

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Men Who Proved the Bible True—No. 2

UNLOCKING THE LITERATURE OF ANCIENT EMPIRES

W L EMMERSON

IN OUR first article we saw how the pioneers of biblical archæology in the early nineteenth century had actually to start from scratch and reconstruct the map of the Bible lands by identifying the long-forgotten sites before they could begin to dig into the dust of centuries for the evidence they sought corroborating the Bible record And thrilling indeed is the story of how these lands were re mapped by travellers, traders, soldiers, and other pioneers in whose hearts was a devotion to the Book of God

As soon as the ancient sites began to be identified, the way was prepared for the second stage in the vindication of the Bible's trustworthiness, the actual search for evidence So, without waiting for the complete reconstruction of the topography of the ancient world, excavators got to work on dozens of sites in Egypt, Palestine, Syria, and Mesopotamia, and it was not long before palaces, temples, and tombs began to come to light, and vast quantities of associated objects from massive archi tectural sculptures to small objects of religious or domestic significance, began to pour into the museums of England, France, Germany, and other countries of the West

Much, of course, was to be learned from the architectural construction and contents of these temples, palaces, and tombs, but of even greater importance than the objects themselves were the mysterious inscriptions upon or associated with them

In Egypt the great temples were found to be covered with a peculiar picture writing designated hieroglyphics by the Greeks while simplified forms of hieroglyphic writing called "hieratic" and "demotic" were found on countless papyrus documents unearthed.

In Assyria, Babylonia, and Persia palace and temple inscriptions and many thousands of clay tablets from libraries and archives were inscribed with curious wedge shaped characters which were given the name "cuneiform" Pictographic tablets were also found in Mesopotamia quite different from the hieroglyphic symbols of Egypt

Clearly, these inscriptions if they could be deciphered would provide priceless contemporary information concerning the history and religion of these ancient empires such as no statues or other objects could hope to convey Their elucidation thus be came the next vital need in the development of the new science But how was the problem of decipherment to be solved? There was only one way Search must be made for inscriptions in at least two languages one a known language and the other an unknown one, so that the latter could be deciphered with the aid of the former

Fortunately, or we should really say providentially, the kings of ancient times made quite a habit of inscribing durable stone monuments with accounts of their conquests and activi ties in their own and the languages of subject peoples while priestly inscriptions and documents were also often prepared in bilingual, trilingual, or even quadrilingual form An actual biblical example of this practice was Pilate's own command that the inscription upon the cross of Christ should be in the three languages of the ancient East—Greek, Latin, and Hebrew (John 19 19, 20)

UNRAVELLING THE MYSTERY OF THE EGYPTIAN HIEROGLYPHICS

It was in Egypt that bilingual material came earliest to light, enabling a beginning to be made in the elucidation of the mysterious hieroglyphic script of its ancient monuments and papyri

In August 1799 during the French occupation of Egypt, General Baron A J Boussard had ordered the reconstruction of the fortifications at Fort St Julien near the Rosetta mouth of the Nile In the course of the demolition of a wall a French soldier by the name of Bouchard came upon a large slab of black granite inscribed with no fewer than three different types of characters The upper portion was Greek which could be read without difficulty Below this was, it was assumed, the same inscription in a cursive or running demotic script and underneath this again a third version in hieroglyphic characters

The value of this slab, which became known as the "Rosetta Stone," was at once recognized and Napoleon gave orders to have lithographic engravings made of it immediately the first two copies being presented in the autumn of 1801 to the Institute Nationale of Paris

France was not permitted to keep its trophy very long, however, for the same year, following the capitulation of Alexandria to the British it was surrendered under Article XVI of The Treaty of Capitulation and dispatched with many other antiquities, by General Hutchinson to England, where it now has an honoured place in the Egyptian Gallery of the British Museum

The Greek inscription on the Rosetta Stone proved to be a priestly decree celebrating the benefactions of Ptolemy Epiphanes to the priesthood of Memphis, and a recital of the honours and worship to be paid to him With this text before them, scholars in England and France got

to work to discover the correspondences between the known Greek characters and the unknown Egyptian ones

Most of the suggestions which had been made up to this time as to the meaning of the Egyptian picture writing had been utterly fantastic and worthless except for one suggestion put forward in 1761 by J J Barthelemy and taken up by G Zoega of Rome just before the discovery of the Rosetta Stone This was that the peculiar oval frames or "cartouches" here and there in the hieroglyphic inscriptions were used to contain personal names

There were several of these cartouches in the inscription on the Rosetta Stone and as the names of Ptolemy and his wife Berenice were mentioned a number of times in the Greek efforts began to be made to decipher these personal names

The first success in decipherment was achieved by Thomas Young, an English doctor in 1811 Born at Milverton in Somersetshire in 1773, Thomas Young was a phenomenal student both of the arts and the sciences Before he entered St Bartholomew's Hospital London as a medical student at the age of twenty, he knew twelve languages and in 1801 he had also discovered the undulatory theory of light He began work in 1811 on the Rosetta Stone inscriptions concentrating on the cartouches of Pharaoh Ptolemy and Berenice and in due course he announced his identification of thirteen pictographs including some number symbols and the plural and feminine signs Six of these have stood the test of later investigations, three were partly correct and four ultimately were shown to be incorrect But on the basis of these first identifications, Young was able in 1818 to write his epoch making article on the *hieroglyphics* for the *Encyclopædia Britannica*

Probably feeling that he was not equipped philologically to continue the work of decipherment Dr Young abandoned his Egyptian studies Their value, however, was recognized by a young French Professor of ancient history at Grenoble, Jean Francois Champollion, who began where Young left off, and in 1821 published the first hieroglyphic alphabet

In 1824 Champollion was sent out by the French government to gather

(Continued on p. 34.)

Able to Save

E Robert Reynolds

EARLY one morning I found myself meditating upon one of the most precious promises of the Word of God "Wherefore He is able also to save them to the uttermost that come unto God by Him, seeing He ever liveth to make intercession for them" Hebrews 7 25

Able to save to the uttermost What a promise! Are you discouraged? Do you wonder if God has forgiven your sins? Have you habits that you cannot break—habits that are breaking you? Perhaps you have made a profession of Christianity, but are not satisfied with your experience, you have a temper to overcome, an unruly tongue to govern, malice against a neighbour or against a *member of the church to get rid of* a sharp business practice to be surrendered, a secret vice or passion to break If so, this promise is for you He *is* able to save to the uttermost Jesus is a wonderful Saviour!

When I was a lad, my father, a missionary took me with him on a mission tour We were on the island of Kauai, the garden island of the Hawaiian group, whose beauty and tropical verdure are made possible by the tropical rains that fall on the volcanic peaks that form the islands' centre, which water is carried to the sea by three rivers

In the vicinity of one of these rivers late one afternoon my father noticed that we had to pass a swinging suspension bridge, for foot use only He stopped to take me across It was a new experience On one side of the river, which was deep and infested with sharks, the bridge was anchored to a tree, on the other it was fastened to a rock buried in the wall of a high cliff I climbed the tree and started across, but when I had gone out on the bridge only ten or fifteen feet I felt it begin to sway Dropping to my hands and knees, fearful lest the footway should tip over and I fall into the river to be eaten by the sharks, or to drown, I crawled back to what I thought was greater safety Then my father, who all the while was coaxing me to go on across the bridge, looked across and saw a Filipino man approach the bridge with a swinging stride, and start across He pointed him to me, and I watched with fascination as he crossed the bridge with the same sure step he had used in making his approach

How often we fail to use the bridge Christ Jesus, through fear of the torrent below! This bridge will never break It is able to stand the greatest strain Step out on it! It will surely hold

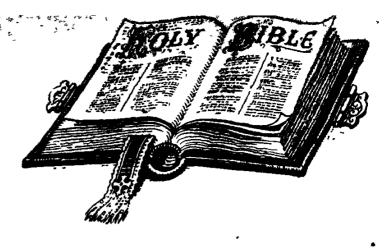
In his ascription of praise to the Saviour Jude wrote, "Now unto Him that is *able to keep you from falling,* and to present you faultless before the presence of His glory with exceeding joy, to the only wise God our Saviour, be glory and majesty, dominion and power both now and ever Amen" Jude 24, 25

Yes, He is able to keep you from falling—able to save to the uttermost He who forgave the palsied paralytic his sins who bade the adulteress, "Go, and sin no more," who cleansed the sinful Simon of his leprosy, who raised the dead and drove out demons, who in the hour of His death forgave His murderers and promised a place in Paradise to the penitent thief, is still the One who intercedes in your behalf, who is able to keep you from falling, and is able to save to the uttermost

The question is, "Will you come unto God by Him?" He is able, well able, to save *you* to the uttermost, if you will come. Will you come today?

YOU AND THE BOOK

THE MILLENNIUM

ALMA L. TIBBS

ALMOST two thousand years ago when the Prince of Peace came to our world, the celestial choir sang, "On earth peace, good will toward men" At that time He came to establish His kingdom in the hearts of men, and all who have accepted Him and the principles of His government have experienced a peace unknown to those who know Him not When He comes the second time to establish His glorious kingdom on earth, there will begin a thousand-year period of peace often referred to as the millennium

1 Revelation 20 2, 3—Satan, God's enemy and the destroyer of peace, will be bound

"And he laid hold on the dragon, that old serpent, which is the Devil, and bound him a thousand years, and cast him into the bottomless pit"

2 Isaiah 24 1, 3—The earth will be completely desolated

"Behold, the Lord maketh the earth empty, and maketh it waste, and turneth it upside down, and scattereth abroad the inhabitants thereof The land shall be utterly emptied, and utterly spoiled for the Lord hath spoken"

3 Jeremiah 4 24, 26—This desolation will occur "at the presence of the Lord"

"I beheld the mountains, and, lo, they trembled, and all the hills moved lightly . And all the cities . were broken down at the presence of the Lord"

4 1 Thessalonians 4 16—At His second coming Jesus will call to life "the dead in Christ"

"For the Lord Himself shall descend from heaven with a shout, with the voice of the Archangel, and with the trump of God: and the dead in Christ shall rise first."

5 1 Thessalonians 4.17—Then He will translate from earth His living children.

"Then we which are alive and remain shall be caught up together with them in the clouds, to meet the Lord in the air"

6 2 Thessalonians 2 8—The wicked living will be slain

"And then shall that Wicked be revealed, whom the Lord shall consume with the spirit of His mouth, and shall destroy with the brightness of His coming"

7 Revelation 19 17, 18, 21—The fowls will feast upon their dead bodies

"And I saw an angel standing in the sun, and he cried with a loud voice, saying to all the fowls that fly in the midst of heaven, Come and gather yourselves together unto the supper of the great God, that ye may eat the flesh of kings, and the flesh of captains, and all the fowls were filled with their flesh"

8 Jeremiah 4 25—After their supper the fowls will leave the earth

"I beheld, and, lo, there was no man, and all the birds of the heavens were fled"

9 Jeremiah 4 23—The earth will be empty, the heavens sunless

"I beheld the earth, and, lo, it was without form, and void, and the heavens, and they had no light"

Note Satan will have one thousand years to ponder carefully the results of his rebellion against God

10 Revelation 20 4—During this period the righteous will engage in a work of judgment

"And I saw thrones, and they sat upon them, and judgment was given unto them and they lived and reigned with Christ a thousand years"

11 I Corinthians 6 2—They will judge the world—those left dead on the earth after Christ's advent

"Do ye not know that the saints shall judge the world?"

12 Luke 12 47, 48—God will deal justly even with the rejecters of His love

"And that servant, which knew his Lord's will, and prepared not himself, shall be beaten with many stripes But he that knew not, and did commit things worthy of stripes, shall be beaten with few stripes"

13 1 Corinthians 6 3—The righteous will also judge angels

"Know ye not that we shall judge angels?"

14 Jude 6—These will be the angels who rebelled with Lucifer—kept not their first estate

"And the angels which kept not their first estate, He hath reserved in everlasting chains unto the judgment of the great day"

15 Psalm 149 7, 9—All His saints will have a part in the judgment

"To execute vengeance upon the heathen, to execute upon them the judgment written this honour have all His saints"

16 John 5 28, 29—Jesus said there would be two resurrections

"Marvel not at this for the hour is coming, in the which all that are in the graves shall hear His voice, and shall come forth they that have done good, unto the resurrection of life, and they that have done evil, unto the resurrection of damnation"

17 1 Corinthians 15 23—The resurrection of life will take place at His second coming

" they that are Christ's at His coming"

18 Revelation 20 5—The "resurrection of damnation" comes at the end of the thousand years

"But the rest of the dead lived not again until the thousand years were finished"

19 **Revelation 20 7—This resurrection will loose Satan**

> *"And when the thousand years are expired, Satan shall be loosed out of his prison."*

20 **Revelation 20 8 10—He will organize the wicked host lead them to attack the Holy City and later be cast into the lake of fire with them**

> *"And shall go out to deceive the nations which are in the four quarters of the earth to gather them together to battle and they compassed the beloved city and fire came down from God out of heaven, and devoured them And the devil was cast into the lake of fire and brimstone, and shall be tormented day and night forever and ever "*

21 Ezekiel 28 18, 19 Satan will end in ashes upon the earth

> *Therefore will I bring forth a fire from the midst of thee, it shall devour thee, and I will bring thee to ashes upon the earth in the sight of all them that behold thee . Thou shalt be a terror and never shalt thou be any more "*

Note There might seem to be a contradiction in the last two texts until we understand the Biblical meaning of the word forever

22 **Exodus 21 6** The servant shall serve his master 'forever'

> *"And his master shall bore his ear through with an awl and he shall serve him forever*

Note No servant can serve after death, therefore forever' means as long as one lives

23 1 Samuel 1 22 was taken to the temple to abide forever '

> *'Then I will bring him that he may appear before the Lord and there abide forever*

24 1 Samuel 1 28 He was lent to the Lord 'as long as he liveth '

> *"Therefore also I have lent him to the Lord as long as he liveth he shall be lent to the Lord*

Note Satan will suffer in the flames *as long as he lives* but when he is ashes his suffering will be ended

25 **2 Peter 3 7**—The fire that will *destroy sin and Satan* will purify the **earth**

> *"But the heavens and the earth which are now, by the same word are kept in store reserved unto fire against the day of judgment and perdition of ungodly men"*

26. **Isaiah 65·17—God has promised to make a new earth.**

> ***"For, behold, I create new heavens and a new earth."***

UNLOCKING THE LITERATURE

(Continued from p. 32)

further textual material and in two years he copied inscriptions which filled 2,000 pages Regrettably, he only lived for two years after his return to France in 1830, but during his last eight years of incessant labour, Champollion added to his alphabet some three thousand syllabic signs and determinatives and had laid securely the foundation of Egyptian grammar upon which later workers have built

Elucidation of Babylonian Cuneiform

While some scholars were busy unravelling the mysteries of Egyptian hieroglyphics others were, with equal diligence, seeking to elucidate the wedge shaped script of Assyria, Babylonia and Persia

It had been pointed out by early travellers in Persia that the inscriptions of Persepolis contained three different forms of cuneiform writing One was believed to be old Persian, the native language of the Iranian kings The second was probably another related language and was designated Susian or Median, while the third exactly like the inscriptions in Mesopotamia, was evidently Babylonian cuneiform Here then was material corresponding to the Rosetta Stone of Egypt upon which the work of decipherment could be begun

The credit for the basic solution of the problem of the cuneiform goes to a young German scholar, Georg Friederich Grotefend in 1802, though it was not until ninety years after that his achievement was adequately recognized The key came to the twenty seven year old college teacher almost magically after only a few days' study, but when he presented his paper to the Academy of Sciences in Gottingen, he was so unknown that his work was never published In 1893 professor Wilhelm Meyer of Gottingen found the original manuscript and published it in the Academy's *Transactions* of that year

Like Thomas Young, Grotefend concentrated attention upon the identification of royal names and from some later Persian inscriptions guessed that the title "King of kings" was invariably associated with these names (Compare Ezra 7 12)

He found the group of characters for which he was looking and assumed it to represent the title "King of kings" With this clue he studied the associated names and soon assigned correct values to twelve letters which gave him the names of Darius Hystaspes and his son Xerxes

In the meantime, without any knowledge of Grotefend, a certain Lieutenant (later Sir Henry) Rawlinson, British political agent in Bagdad, during a visit to Persia in 1835, had copied two inscriptions on Mount Elvend and, by precisely the same methods as those used by Grotefend, had also identified the names of Darius and Xerxes Shortly after, his attention was drawn to the great trilingual inscription of Darius I on an almost unscalable cliff face at Behistun on the Persian border After exploits of dangerous rock climbing, he succeeded in copying the three inscriptions and from the long list of provinces of the Persian empire, the names of which were known in Zend (the earliest Persian dialect) and in Greek, he was able to build up the entire cuneiform alphabet In 1837 he published his elucidation of the Persian cuneiform script in a paper to the Royal Asiatic Society

Continuing his studies, Rawlinson turned his attention to the Susian inscription which he showed to be not alphabetic but syllabic in character Working in collaboration with Edward Hincks, a clergyman in Ireland and Edwin Norris, secretary of the Royal Asiatic Society, the second text of the inscription was deciphered Finally, in 1851, Rawlinson published the Babylonian version with an almost complete translation

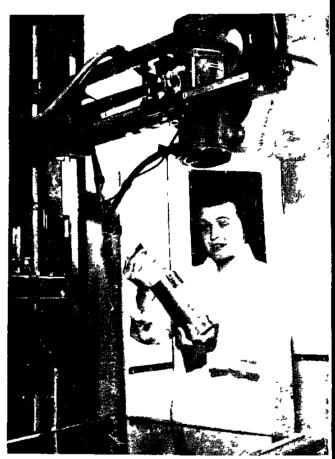
Since then Sumerian, Urartaean, and Hittite cuneiform scripts have been deciphered, opening up almost all the literatures of the Mesopotamian valley and the highlands of Asia Minor and Persia

Thus, with the map of the lands of the Bible substantially reconstructed and marked with the innumerable sites of ancient centres of civilization, and with the several keys to unlock the inscriptions which were beginning to accumulate in the great museums of Europe, the biblical archæologists were ready to embark upon the third and most thrilling stage of their task, the comparison of the relics of the ancient civilizations of the Bible with the Bible record, which was to halt the destructive work of the armchair critics and re-establish, in all open minds, the absolute veracity of the Scriptures

ATOMIC ENERGY AND MEDICINE

At Argonne Cancer Research Hospital designed specifically for atomic-age treatment, a screening committee selects patients who fit into the research programme. In lung cancer treatment as shown here, radioactive gold from a lead container enters the patient's body with a saline solution through a needle in his back.

PORTABLE ATOMIC X-RAY UNIT DEVELOPED

A technician holds the Atomic X-ray unit, which contains a tiny particle of radio-active thulium mounted in a [illegible] holder with a carrying handle. The entire unit weighs less than ten pounds but provides rays which are comparable in energy to a 100,000 volt X-ray machine similar to the one also shown in the picture.

UNIQUE MUSEUM STRESSES PEACETIME USES OF ATOMIC ENERGY

Visitors to the American Museum of Atomic Energy, at Oak Ridge, Tennessee, study an exhibit panel forecasting the use of atomic power in homes, farms and factories.

The Oriental Watchman and Herald of

HEALTH

46th YEAR OF PUBLICATION

Contents

March 1955

L. J. LARSON, M.A., B.Sc., Editor

DUNBAR SMITH, M.D., D.N.B., D.T.M. & H. (LOND.), Associate Editor

J. B. OLIVER, M.D., D.T.M., Associate Editor

OUR COVER

NOMADS OF SOUTH INDIA An elder poses for a picture The nomads are well-built and work hard in forests shooting a variety of animals. Their ornaments consist of tiger nails, beads and charms wrapped in silver

Photo by T S Satyan

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Minute Meditations

WHERE ARE YOU GOING?

D. A. Delafield

"WAIT a minute, Mr. Carter; where are you going?" The patient voice of Conscience was questioning a busy commuter about life and destiny. For years this business man had been so occupied in making a living for his family that he had had little time to think about the things that give life meaning.

Five days a week William Carter rolled out of bed at six-thirty and made hectic preparations for the forty-minute race to the city office. When he boarded the train at 7:05 he had shaved and dressed, gulped a cup of coffee, swallowed a piece of toast, kissed his wife good-bye, and run four blocks—all in thirty-five minutes. When he returned at night he dragged into the front door about six with a newspaper under his arm, his nerves wrought up, his stomach tight, and in no proper mood to sit down and eat a big supper.

After the evening meal he tried to read the newspaper, but Carol wanted help on her algebra. When the children were finally all in bed, it was television until eleven or twelve o'clock.

No wonder Conscience was concerned about Mr. Carter. He wasn't taking time to think out the big questions. So, occasionally in the stillness of the night Conscience would quietly prod him with soul-stirring thoughts like these:

"Where are you going at such a rapid pace? Aren't you neglecting life's important things?

"You can make the world a better, safer place because you have been here. Will you try?

"You work hard five days to make a living, but you have your

(Continued on p 5)

THE EDITOR SAYS

(We had planned on presenting some information and facts on the devastating ruin to home health and happiness caused by the demon Alcohol but feel that the story presented in this article will do more to convince our readers that Alcohol is best left severely alone —P A T C L)

DEATH IN THE BOTTLE

—The Confession of a Moderate Drinker—

DONALD M HEWITT, M D.

"I GUESS you're wondering why I dropped in to see you," remarked the tall lean-jawed, sun-tanned man opposite me in my consulting room

"Well," I answered, looking into the icy blue eyes gazing steadily into mine, "I have a pretty good idea that it wasn't just because you wanted to pass the time of day or discuss the weather Further, I observe that you're from Texas, and that you're either a rancher or an oilman"

The man's gaunt features relaxed in a tight smile, and a slight twinkle replaced for a moment the steely look in his eyes

"Say, doc," he drawled, "that's not bad at all for amateur Sherlock Holmesing I *am* a rancher from around Fort Worth way, and I did stop in to talk to you about something that's been on my mind for a long, long time In fact," he continued, suddenly clenching his hands, while a look of intense bitterness and hatred clouded his face, "there's something on my mind I'll never forget ... that I can't forget even if I live to be a hundred or more.

"You see doc," he continued as I listened interestedly, "I've always had booze around the house Before I got married about thirty years ago, I was a pretty wild character and did my full share of drinking and raising Ned But after I met the little woman, I settled down and began socking that money away in the bank instead of supporting the saloon owners with it The ranch prospered, and my wife and I were blessed with a fine family of two boys and a girl I continued to drink every day just a few pegs every evening before and after dinner ... the so-called social drinking, you understand" The man's voice suddenly became hard and scornful "Social drinking!" he repeated, in a tone filled with utter loathing, "why, that's the most insidious, damnable, seductive phrase ever coined by Satan Social drinking was what led my boy Roger to Chicago ... yes, he died there in a stinking liquor den on skid row without a friend to comfort him That's what social drinking did for him!" the man ended, pounding his fist on my desk with a vehemence that threatened to shatter the glass top

"After Roger died, I made up my mind to put the booze out of sight where the two younger kids would never see it But the cursed habit had got me, too, although I never got into the trouble that many other alcohol addicts I know do I continued to take a drink now and then on the sly, where I was sure the kids wouldn't see me My daughter Dorothy grew up to be a tall, slender Texan beauty who was the apple of my eye In high school she was the most popular girl in her class, and the boys fought over her for dates Then came time for college, and Dorothy enrolled at Texas Christian, where her good looks, generosity, and good nature quickly brought her the popularity that she had enjoyed in high school

"I will never forget the shock—the utterly devastating blow—I suffered the night that Dorothy came back from a college dance giggling foolishly and reeking of alcohol My thoughts went back to my poor son Roger, who had ended his life as a skid row alcoholic rotter and I stood aghast at the prospect that my beloved daughter was starting down the same enticing but disastrous path I cursed myself for my own weakness that prevented me from putting booze forever out of my own life

"Next day I had a heart-to-heart talk with Dorothy For the first time I told her the truth about her brother Roger and how booze had cut his promising career short I pointed out the dangers awaiting her if she continued her seemingly innocent drinking, and asked her to promise me to leave the stuff alone Dorothy thought the world of me and assured me if it would make me and mummy happy, she'd never touch the stuff again And I believe she kept her word, until one night she told me she was going to a dance with one of the big men on the campus ... president of the student body, and so forth She was so excited about the date that I didn't have the heart to say anything that would put a damper on her high spirits, but for some reason that I guess I'll never be able to explain, I had a premonition that the evening was going to end in tragedy

"Just before Dorothy's friend

was due to call for her, I got a call from the ranch foremen saying that a prize bull I had bought about two weeks before was sick I had paid $10,000 for him and naturally wanted to protect such an expensive investment Giving Dorothy a hurried kiss, I jumped into my station wagon and took off for the ranch corrals about four miles away It took me about three hours to get everything straightened out, and when I got home, Dorothy had been gone for a long time I found my wife sitting in the living room with a worried frown on her face

" 'Why all the heavy thinking?' I asked, seating myself on the arm of her chair and putting my arm around her

" 'Oh, Ben,' she said earnestly, 'I guess you'll think I'm just a foolish old woman, but when Dorothy went out of the door with that young Rodney Potter about an hour ago, I could have sworn I saw a whiskey bottle sticking out of his hip pocket'

(Continued on p 28)

Where Are You Going?

(Continued from p 3)

evenings free and two extra days every week besides. Why not take time to be a better citizen and a better neighbour?

"Your wife and children will follow your example in religious matters. Are you a man of faith, or do you neglect God and the church?

"When life is gone and you stand face to face with eternity, what then?"

Life has meaning and the future has promise only when we think the question of destiny through and act upon a firm conviction. Bill Carter made his choice, and it was a good one. You may do the same. Either we get hold of ourselves and take time for real living, or we race on heedlessly to a tragic finish.

Stop to think and pray about the future. God has a plan for your life, and He will help you to chart the way.

WHAT'S IN THE NEWS?

Ethiopia suffers from a critical teacher shortage There is only one for every 12,000 persons Of the 1,200 teachers in the country 800 have less than four years of formal education and only 17 have completed high school

* * * *

A unique fish experiment is being conducted at McMaster University in Hamilton, Ontario, Canada Its purpose is to determine the hearing ability of fish It has been discovered that these creatures can hear lower tones than human beings, but do not have as high a range of hearing Most interesting of all laboratory workers have trained the fish to answer a dinner bell to obtain their food

* * * *

As much as 100,000 board feet has been cut from a single redwood tree of California

* * * *

The highest death rate from drowning is recorded among boys between 15 and 19 years of age

* * * *

Of the half million inhabitants of the Mediterranean island of Cyprus, the overwhelming majority are Greek in stock religion and language But about 80 000 of them are of Turkish descent The island has been a British possession since World War I

* * * *

Galileo, Italian astronomer and physicist invented a practical thermometer back in 1592, the National Geographic Society recounts The instrument was made up of a large air filled bulb and a glass tube containing water When the air became heated it expanded and pushed the water level down, thus permitting a gauge of the amount of heat

* * * *

Cannibalism, still practised in a few areas of the world, is considered by the natives to be the most respectful way of disposing of the dead

* * * *

When children are five years of age, reports "Science News Letter" they are more likely to get contagious diseases than at any other time

* * * *

In the 16-mile stretch between Bundi and Barkhera, India's new railway passes through 4 tunnels and over 6 major and 76 minor bridges

* * * *

Recent wage boosts and a decree ordering seven days' pay for six days' work has increased the pay of most workers in Bolivia by 45 to 50 per cent

* * * *

Aeroplane manufacturers have found a material for construction that is as strong as some steel and is lighter in weight than aluminium. It is plywood

* * * *

The average temperature of the surface of the earth is about 60 degrees, but the average temperature of the planet Mars is about 22 degrees below zero

* * * *

Making Ready for the BABY

NINA M. MUNSON, M.D.

A very practical article that tells just what is needed for home delivery.

IT IS worth while to give practical counsel to mothers on this important subject Intelligent obstetrical care during the entire period from the beginning of pregnancy until the baby arrives, goes a long way in assuring physical and mental health for the child, as well as future health for the mother

The advice to the expectant mother up to the time of delivery is essentially the same whether she is to remain at home during the confinement period or go to the hospital. There are conditions which sometimes exist, in spite of the most excellent pre-natal attention, that require hospital care, and the expectant mother should not hesitate to co-operate with her physician if he advises her to go to a hospital

At the very first indication of pregnancy, the expectant mother should without delay consult a competent physician and be ready to cooperate fully with the programme he will suggest for her to follow On the first visit, he will take a very careful history and make a thorough physical examination, which will include blood pressure, weight, certain blood tests, and urinalysis On these findings he will base his outline for her programme in regard to diet, exercise, personal hygiene, and elimination He will instruct the patient to return at regular intervals for careful check-ups, so that he may make any adjustments in the programme which may seem indicated In making regular visits to his office or to the clinic, the expectant mother may be assured that she is taking "a stitch in time" which will save her many regrets later on At each subsequent visit the patient should bring any questions which have come to her mind in the interval

She should not worry over the things she does not understand, for the physician she is consulting can give her clear and dependable answers to the many otherwise troublesome problems Though Aunt Budwar, or Mrs. Pillai who lives just next door, may feed in-

formed in such matters, their advice may be most unscientific and unreliable, and may come far short of establishing the proper attitude toward the matters in question. Many times those things which appear so insurmountable become quite unimportant and unworthy of much concern when illumined by the knowledge and experience of the physician On the other hand, they may be the very items about which the doctor wants to know, and in his hands proper attention can be given them

After obtaining an expert medical examination, in which all physical defects have received due consideration, and with a programme of general living well in mind, the next step is to see a good dentist for a careful and thorough examination of the teeth The expectant mother should state her condition, and tell the dentist that she wishes to have the teeth in good repair, with no pus pockets or cavities remaining untreated Then she should give her diet very careful study to make sure that it will furnish the extra supply of food elements needed for the protection of her own teeth and the building of the bones and the teeth of her baby Contrary to the one-time belief, it is wholly unnecessary for the pregnant mother to sacrifice her teeth if she intelligently selects her diet and gives her teeth proper dental and hygienic care Brushing at least twice a day and rinsing the mouth at night with a simple mouth-wash, such as one teaspoon of bicarbonate soda in a glass of water, will assure cleanliness, which is one of the first steps in preventing tooth decay A simple and inexpensive tooth powder may be made at home by mixing half a teaspoonful of table salt and ten teaspoonfuls of baking soda Use dry or dissolve some of the powder in water

Once the physical examinations are cared for, one must look to the habits of living. These, if already healthful, do not require any great change unless some suggestion has been made by the doctor Pregnancy is not an abnormal condition; however, it does put an added strain upon the body, which, if properly met, leaves no ill-health behind Neglectfulness, on the other hand, may not only leave the mother an invalid, but may bring

into the home an offspring handicapped and retarded by ill-health at the onset of his life A child cannot choose his parents, but he has a right at least to a good start in life by being endowed with health

So much advice is given the mother-to-be during this very important period that the father-to-be may consider his part of little importance He supplies the necessary funds, and assumes that his duties end there Extra money to meet the additional unavoidable expense is an undeniable necessity, but it does not release him from his other responsibilities toward the mother's needs It is his duty to see that she is spared mental strain and anxiety He should give her his fullest co-operation and help in obtaining proper medical care, and study to know how he may ease her load during the period of her pregnancy She needs his helpful understanding, his optimism, his wisdom in carrying out to the fullest every measure that will work toward a healthy child and a healthy mother. He may think it is the concern of the mother to know what is best, but he hardly leaves his house to the builders, or his animals to the care of another, or his car neglected—all must receive his watchful attention to see that the best care is given to each of them But what pride and satisfaction come to the man who has in his home a healthy baby and a healthy wife and mother, as he realizes that he has had a definite part in making them so He has fulfilled his duty in aiding his loved one to obtain skilful medical care and good nourishing food In addition he has helped to maintain in the home an atmosphere that promotes physical and mental wellbeing

During the period of pregnancy the diet should be nourishing, and should contain an added intake of minerals and vitamins The caloric intake may be somewhat regulated by the demands of hunger, but the proper amount of minerals and vitamins cannot so easily be regulated Too, the appetite of an expectant mother is an unsafe guide in the selection of foods, for sometimes she craves foods that are not wholesome Therefore, foods should be chosen by judgment and knowledge rather than by the demands of appetite The mother is nourishing herself and her child, and the quality of food should be considered rather than the quantity Quantity, too, may vary The very thin, mal-nourished person requires more in quantity than the already obese individual There are other physical conditions which govern the diet, such as diabetes, nephritis, heart conditions, tuberculosis, but these will be discovered by the attending physician and taken care of under his directions In general, however, the pregnant mother each day should have at least one citrus fruit, one quart of milk, one raw vegetable salad, one egg, cooked green leafy vegetables, whole-wheat bread or wheat-germ cereal, and six to eight glasses of water.

(Continued on p. 26.)

On the Trail of Radiant Health—No. 12

DO YOU WANT TO STOP SMOKING and DRINKING?

WAYNE McFARLAND, M.D.

"I KNOW it isn't good for me, but Doctor, I've tried and I go right back to it again. I'm now smoking as much, or more than I ever did, but, honestly, I'd *like* to stop"

If they will be perfectly honest, most people are convinced that they ought to stop smoking That goes even for doctors who have the habit. They admit, that it isn't doing them one bit of good, that it can actually do them injury Expensive, dirty, and harmful! How many times have they secretly wished to be rid of the filthy weed

This article is for those who really want to stop We feel sure that once you have made up your mind, you've settled it once and for all that this habit must cease, then we can help you

Most people *know* that science has found that nicotine causes the stomach to be more susceptible to ulcers. In fact, some clinics just frankly tell the patients with stomach trouble they will not treat them if they are going to continue smoking Nicotine causes the stomach to produce excessive amounts of acid, and this will not permit the ulcer to heal

The effects of nicotine on the heart are also well-known Constriction of the coronary arteries which supply the blood to the heart itself—coronary heart attacks—take thousands off to an early grave.

Cancer of the throat and of the lungs is on the increase. In several research centres cancer has been produced in animals by applying tobacco tars to the skin Cancer of the throat and lungs is on the increase, and the finger of science points to tobacco tars found in snuff, cigars, and cigarettes

TOBACCO'S TWIN SISTER

Now the twin sister of tobacco is alcohol And these two we will discuss together When it comes to alcohol, we now are no longer fooled into thinking it a stimulant Medical science says it is a depressant drug

The reason a person seems to be stimulated is that the higher centres of his brain are put to sleep They are the centres of the brain where is lodged a man's reason, his will power, and judgment With these put to sleep by the drug alcohol, the man lacks that part of the brain which makes him different from an animal His self-control is gone. He talks more but says less. He feels that he is better though he is actually worse He has robbed himself of the brain nerves that keep him in touch with Heaven. His conscience is dull

The effect of both alcohol and tobacco on the body is that of a protoplasmic poison. By that we mean that the internal substance of each cell which we call the protoplasm is drugged The very life of the cell is endangered. The stomach, the liver, the delicate nervous system, are all unbalanced, and the worst part about it is that these drugs are habit-forming Addiction to their use is seen among men and women on every side.

Can you not more plainly than ever before, see the relationship between your eating and drinking and thinking? Do you not see the import of Jesus' words when He said. "For as in the days that were before the Flood they were eating and drinking, marrying and giving in marriage, and *knew not* until the Flood came, and took them all away"? Matthew 24:38, 39.

The purpose of the health programme we are discussing is to reduce, as rapidly as possible, your craving for alcohol and nicotine

I remember one patient, a lady who had heart trouble and was very nervous. We told her she should stop smoking, and that we would put her on a schedule that would help, provided she thought she could stand it.

"I'll do whatever you say," she assured us; so we started in. When we had finished eating that meat,

fish, [illegible] liquor, pastries, sweets, and ice cream would be taboo, she looked up and gasped, "Will I have none of the good things of life any more?"

We assured her that there was plenty left, and then explained the reason for leaving off the meat, tea, coffee, and alcohol. This was to help her overcome the craving for cigarettes which would surely be present. We pointed out that the uric acid and other wastes found in meat which give it flavour, also would certainly stimulate her nerves for the nicotine. We showed her that tea and coffee would do exactly the same. She promised to try After all, ten days was not too long, and she wanted her health

She returned in a week a changed woman. After telling me how much better she felt already she said she had a confession to make She was doing fine on the strict daily routine we had outlined for her One day she thought she would take just one cup of coffee, "And do you know, Doctor," she continued, "in a few minutes I just *had* to smoke I couldn't keep from it You were right about that coffee making me want to smoke"

That lady got much better, since when, as far as I know, she has never touched tobacco, tea, coffee, or liquor

The meat may be a little more difficult for some, however, most individuals find that it is not missed as much as the tea or coffee

Helpful Rules

The following rules have been helpful to many in overcoming the tobacco and alcohol habit If you will stick by this programme for three days, you can do it for a week, and in ten days you will know that you are going to make it all right. So far, we have not had any one die who did this, and we have helped those ranging from youngsters to oldsters, some of them close to eighty years of age.

1 Take a warm bath (full bath tub) thirty to forty-five minutes twice daily, drinking two glasses of warm water or hot lemonade while lying in the bath

2 Drink eight to ten glasses of water between meals Keep a record, and mark down the number if need be, in order to be certain you are drinking the full quota

3 After meals, rinse the mouth with one-half or one-fourth of one per cent solution of silver nitrate Do not swallow any of the solution, it is poisonous, but it nullifies the taste for tobacco

4 Walk outdoors for fifteen to thirty minutes after each meal, breathing deeply during this period *Do not sit* down in your favourite chair after eating This is the time you will want to smoke most of all *Get outside,* the chair, curtains, rugs, and everything are saturated with tobacco smoke, so get away from them If it is alcohol that is perplexing you, then stay away from the folk who offer you drinks Keep out of sight of the places and faces that you associate with drinking

5 If you feel that you just can't stand it any longer, hop back into the bath or take a warm shower It's pretty difficult to smoke or have a glass of ale in a shower, and besides, warm water will calm your nerves.

6 Avoid the following. mustard, pepper, spices, vinegar, catsup, rich pastries, and fried food.

7. Do not eat fish, fowl, or meat, or use tea, coffee, or cola beverages. Often we can tell when a man is drinking or smoking heavily—all his food must be highly spiced, or made hot with pepper or mustard. He eats heavily of meats and rich foods He just is making it difficult for himself and well-nigh impossible to stop smoking or drinking as long as he continues these habits

8 Eat all you desire of fruit, vegetables, cereals, nuts, milk, and margarine. Especially lots of fresh fruits If you will skip all sweets, pastries, biscuits, ice cream, and chocolate during this ten day period, you will overcome your craving for nicotine and alcohol a lot faster

9 For extra amounts of vitamins, particularly of B complex, which is the vitamin to help the nerves as you take from them the nicotine and alcohol, at each meal use two or three tablespoonfuls of wheat germ, and one or two tablespoonfuls of dried brewer's yeast powder Take the yeast in milk or tomato juice If the yeast causes stomach distress, then omit it and use three or four tablespoonfuls of wheat germ at each meal I would also suggest that you have one to three glasses of hot Yex or Marmite broth a day

10 Last of all, and by far the most important of all, ask God to help you If you have never prayed before, this is the time to learn All you need to do is to follow the Lord's advice "Ask, and it shall be given you" I believe Heaven helps any man or woman who is really serious about stopping the use of tobacco and alcohol Place your will on the side of God's will, and you are invincible You can never fail with God as your partner.

Follow the schedule outlined each day and you *will* feel better and have a sense of well-being that you have not known for a long time Furthermore, you can look the world straight in the face because *you,* not Lady Nicotine, are dictating the running of your life; because *you,* not alcohol, are controlling your will power and reason.

BUILDING A HAPPY HOME

CLIFFORD R. ANDERSON, M.D.

NOT long ago I watched two birds building a nest in a tree It was the mating season, and all nature was radiant and beautiful It was a pleasure to watch them as they flitted about, searching for suitable materials for the home they were building The male bird was very active, bringing bits of straw and threads of cotton and wood, some of which his mate accepted, and some of which she threw away When it came to the home, *she* seemed to be the one who made most of the vital decisions

When the nest was about half built, the little lady decided that the place was not suitable She tore down the nest and then started all over again in a safer spot, where the neighbour's cat could not reach the nest And regardless of how much her mate might have protested, she let him know that nest building was primarily *her* responsibility It was his job to feed and to protect the family

When the little home was completed she laid three tiny bluish eggs in the nest and then covered them with the warmth and protection of her own body What a scene of beauty and peace! No picture in all nature looks more serene than that of a little mother bird on her nest Her mate sat on a branch nearby, singing as if his throat would burst with pride and melody Several times a day he took her place on the nest, while she flew off for food and rest

After a few weeks there was a day of great excitement. The babies were chipping their way through the egg shells Of course they were far from ready to live on their own They had no feathers Their beaks were large and ungainly Their mouths seemed to be constantly open for food All day long, from dawn till dark, the parent birds flew back and forth, bringing food for the family After the young birds' feathers had grown, they were taught to fly, and from henceforth they were able to live on their own The cycle of life of a small bird is truly beautiful

And yet, in its broadest sense, there is not so much difference between the birds of the forest and ourselves To them, mating and

The presence of a child seems to sweeten and refine our natures and reshape rough personalities It seems to take a child to evoke the virtues of patience and unselfishness

the development of a home are a normal part of life Between them there is a comradeship and a team-work that we as humans would all do well to emulate

There may be some who think that existence goes on more or less according to the brutal ways of the jungle, and that human life is cheap But if we will consider carefully, we cannot help but reach the conclusion that man is the masterpiece of creation Thomas Jefferson said that man was endowed by his Creator with certain inalienable rights, among which are life, liberty, and the pursuit of happiness Although it is true that life in the jungle may often be 'red in claw and fang," we must also recognize that there is little happiness there The way to happiness is not found amid the cruel ways of the jungle

Life is beautiful only when it is lived according to the ideals of Heaven There are definite laws that govern the universe Disease and unhappiness are always the result when we turn away and disregard these principles "The way of transgressors is hard" No plant can produce healthy fruit if the soil in which it is growing has been depleted of life-giving minerals And no home can produce a happy family unless the atmosphere in which the children are growing up is one of peace and harmony, according to the plans of God

A happy home should be the heritage of every child that comes into this world Children should not be allowed to be unhappy for long

If all children were given the right kind of training, there would be no more wars and no more poverty A truly happy home is one where each member of the family has his place, and where all are governed and given an equal share of responsibility and affection Such a happy state of affairs can come about only when there is a good relationship among all who live there

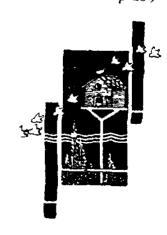
Birds live largely by instinct This is all they need for their uncomplicated lives But humans have been endowed with the power of reason Their lives are far more complex, and their responsibilities are far greater For this reason many homes are not very happy places in which to live Unfortunately many people are too selfish to live happily together They are too self-centred, too wrapped up in their own wants and wishes to think of others This self-centredness is passed along from generation to generation, for children cannot help but walk in the footsteps of their parents

To build a happy home both parents must be prepared to get along well with each other Each must respect the rights of the other, and both must be prepared to work out their problems without quarrelling Each must be willing to give in to the other for the good of the home Defects in disposition may have to be corrected, otherwise they may become stumbling blocks to a successful and well-adjusted family

True happiness in the home depends on people who are unselfish They must be thoughtful of others People who are selfish are immature. They have not really grown up in the fullest sense of the word Such people always want their own way, regardless of the feelings of others By their actions they are saying, "I want what I want when I want it!" But this is not the way to build a happy home On the contrary, unselfish service for others brings real pleasure and happiness to all in the home Petty things that once annoyed fade away

The real centre of every home is the mother No other can ever really take her place Her influence is dominant Her tastes, her ideals, her desires, like those of the mother bird, will influence everything that goes on in the home If she is cultured and refined, the home will be conducted on a high level If she is slovenly and ignorant, the home will reflect her poor background and her low ideals If education is important to young men, it is even more important to young women, for into their hands is committed the future of the race

Did you ever visit a home without children? I did recently Every thing was exactly in its place Those who lived there seemed self-centred—almost neurotic It seems to take a child to bring out the virtues of patience and unselfishness and love that lie dormant within us That is why the Creator has arranged that humanity must grow and develop so slowly No other growing thing is so long dependent upon its parents as a

(Continued on p 28)

Do You Need GLASSES ?

ROBERT J. SCHILLINGER, M.D.

Will a tired hitch-hiker accepted a ride? Your eyes may be working overtime and need a lift themselves.

HAVE you ever heard of a tired hitch-hiker refusing a lift because the ride about to be offered is too comfortable? Probably not, but you may have heard of people who were shocked at the thought of wearing glasses

One of them was Mrs Smith, who had perfect eyesight but recently noticed that when she tried to read a book she fell asleep! She was only thirty-five years old, and had no particular eye complaints But examination revealed that she had a moderate degree of hyperopia This is a condition in which vision is slightly out of focus when the eye is relaxed The focusing mechanism in the eye can adjust itself to overcome this blur, so that vision is perfect But it takes a certain amount of energy, and therefore becomes a strain to keep the eyes in constant focus Mrs Smith needed much more energy than normal to keep her eyes in focus, and after thirty-five years of overtime work her eyes required help.

If Mrs. Smith had lived only a few centuries ago, nothing could have been done to help her, and soon she would have been compelled to stop reading altogether But she appreciates the comfort of her glasses as much as the weary hitch-hiker does getting into a smooth-riding car At first she objected to the idea of wearing glasses, because she had been told that glasses are only a form of crutches In certain aspects they are glorified crutches, but so are cars, and people don't object to buying new cars on that basis

Mrs Smith's experience shows that a person may suffer from eye-strain almost without realizing it This kind of eye trouble differs from that of the average person, who needs glasses for reading upon reaching the age of forty-five Mrs Smith could still read the finest print at the usual reading distance But even though a person has normal vision he may still need glasses People wear glasses because they enable them to see (as in near-sightedness), because they relieve eyestrain (even though they may be able to see quite well without glasses), or because they relieve a combination of both factors

Early signs of eye-strain may consist of a tired feeling in the eyes when doing things that require accurate vision, such as driving, reading, sewing, watching a motion picture, or looking at television The eyes may ache, itch, burn, and become bloodshot There may be inflammation of the lids or lid margins (this may be caused by other factors also, and is not necessarily a sign of eyestrain) Eye fatigue also causes various forms of headache The most common kind involves the forehead and often the back of the head, or it may be in the temples or even between and around the eyes

Although children may suffer from as much eye-strain as adults, even to the point of greatly impaired vision, they seldom complain of these symptoms, especially before they go to school In children we sometimes run into the serious symptom of cross-eye, which in many cases is only a result of excessive eye-strain It can therefore be corrected with glasses in a certain percentage of children But they must get the proper care early enough. Surgery is often necessary in cross-eye to obtain more perfect and lasting results But whether to resort to surgery is a decision made according to each

individual case; it can be made only by an eye physician.

A child's eyes were not made for the purpose of reading comic papers while lying on the floor. Prolonged forced near vision such as this may cause disturbances of the co-ordinating mechanism of the eyes, especially before the age of five or six years, because the ability to see with both eyes together does not fully develop before this age The result of such unwise near stimulation may be cross-eye or even a difference between the two eyes, especially if the child has a refractive error

If the parents notice any tendency in a child's eyes to cross or diverge, they should have his eyes examined without delay You may wonder how it is possible to test a child's eyes when he cannot read or talk Eye physicians always dilate the pupils when examining children, using a medicine that permits them to study the interior of the eyes thoroughly for any diseases otherwise easily missed Furthermore, the same eye drops relax the focusing apparatus, enabling the physician to test for refractive error with a high degree of accuracy This form of examination is superior to any other method When it is not used, it is like a physical examination without removal of the patient's clothes

Even in people with normal eyes we find variations in their ability to perform certain vital tasks, especially at close range. This is partly because of the complexity of human beings, where no two individuals are exactly alike in every respect Some people complain of eye-strain even when there is no need for glasses and there is no eye disease or functional disturbance Students, stenographers, and book-keepers sometimes belong to this class At times a vacation or change of occupation is the only solution.

A person who does not enjoy walking and tires easily will not last long as a mail carrier. So it is that if you never did particularly enjoy reading, a pair of glasses will not change you into a book-worm

We hear of people who read several books a week, sometimes one a day But how much information do they remember? Reading involves a complicated process in the brain When too many sentences are crowded into the brain by rapid reading and the reader lacks the talent of a genius to organize them quickly, the result may be like a post office at Christmas-time Unpleasant symptoms such as headache, nervousness, and irritability are likely to set in

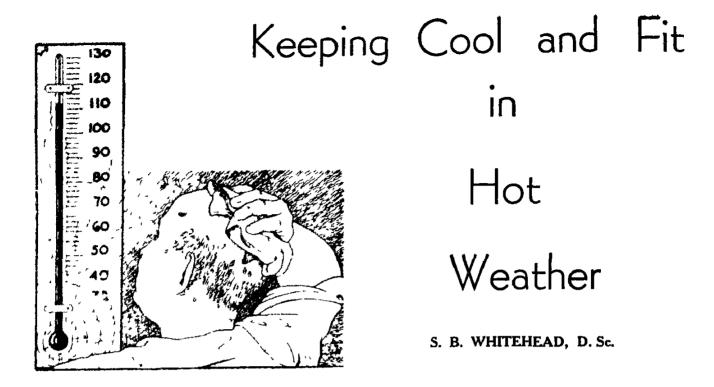
It is best to let the eyes rest for five to ten minutes after each half hour of reading To rest them, close them or look at distant objects. Applications of alternating hot and cold water compresses are often beneficial, especially during periods of stress such as examination time.

There is need for good light in our everyday tasks Which is better—the old-fashioned incandescent light bulb or the more modern fluorescent tube? There is no proof that fluorescent light can cause damage to the eye, but some people experience discomfort when using it On the other hand, there are many who feel that fluorescent lighting is of great benefit It is impossible to predict just how it will affect a certain individual The incandescent bulb is certainly quite satisfactory in the home. In its light the red and brown rays predominate, and they give a pleasant and soothing effect In contrast, fluorescent light has a tendency to make things look cold and steely

(Continued on p 24)

If you notice that your child has any difficulty in reading or if he holds the book too close to him and peers at the page, have his eyes examined without delay.

Keeping Cool and Fit in Hot Weather

S. B. WHITEHEAD, D. Sc.

IN WINTER cold or summer heat the internal temperature of your body rarely varies from the normal average of 98 6 F A variation of even a few degrees heralds sickness and discomfort If anything over-heating is more acutely dangerous than *over-cooling* By understanding how the body regulates its temperature and helping it, you can keep cool in hot weather and what is more important, keep fit for your summer fitness has much to do with your health in the winter that follows

The Body's Thermostat

The centre of temperature-regulation in the body is in the brain, at the base or about ear level, and is known as the hypothalamus In acts like a thermostat, responding to the slightest changes in the temperature of the blood

When the blood temperature rises above the level for the healthful working of your body, the hypothalamus relays messages to the myriads of tiny blood vessels throughout your system Those in the deep-seated, internal organs shut down. Those in the skin open A greater volume of blood then flows to the dilated skin vessels where it can radiate and lose its heat to the air surrounding the body, and then return cooler to the heart and lungs for re-circulation

When the weather turns hot, this *may not be sufficient for the* body's comfort The hypothalamus sends out fresh messages through the nerves to the sweat glands of the skin These sweat glands are intimately clustered by blood vessels They take fluid from the blood and excrete it They work all the time more or less, since perspiration contains salts and materials the body does not want But on a hot day, they may work so fully as to pour sweat out faster than it can vaporize into the air

When perspiration evaporates, however, the skin and the blood underneath are cooled Men begin to perspire freely at about 85° F, women when the mercury goes up to 90° F So efficient are the cooling mechanisms of the body that your body can stand boiling temperatures when the air is dry enough to absorb the sweat immediately, and you get enough fluid to replace the loss.

Limiting Factor

In normal living, however, the limiting factor is humidity Under humid conditions, the perspiration cannot evaporate freely The air is already moisture-saturated Your skin and blood do not cool, and so your internal temperature rises The danger of heat-stroke is always greatest under humid conditions Sun-stroke occurs under conditions of over-exposure to hot, intense sunshine

Increased perspiration drains the body of water and salts The first essential in keeping cool is to meet this drain It is not enough just to drink more liquids You must also take a little more salt Extra pinches of ordinary salt—though rock or sea salt is better—should be added in seasoning food, and it is always a good thing to add a pinch of salt to drinking water Otherwise, your tissues are only supplied with a dilute, ineffective fluid and you may suffer from muscle cramps

Fruit and vegetable juices, milk and milk drinks are even better than plain water, since they also contain essential mineral salts Car-

bonated waters do nothing extra beyond providing more fluid Too cold or iced drinks may be discomforting, chilling and partly paralysing digestion unless drunk slowly Indeed, they may hinder temperature regulation by drawing blood back from the skin areas to the stomach A hot drink is always more cooling in its end effect than a cold one It flushes the skin with blood, causes momentary excess sweating, but leaves the body cooled afterward

A cold water splash is very refreshing on a hot day, but be careful not to over-do it as excessive cooling may result in headaches and gastric sickness

Sensible Rules

Keeping the body cool and fit on hot days is not hard if you will follow a few sensible rules As far as diet is concerned, the most important precept is to eat less Heating foods, such as fried fare, rich sweet cakes, biscuits, chocolate, desserts, should be eaten sparingly The more easily digested your meals, the better, since this lessens the concentration of blood needed in the internal organs

It is wise to give pride of place to the sun-ripened raw foods, such as salads in variety, fruits and berries Not only do these foods digest easily, but they supply more moisture for the tissues, plus vitamins and alkalinizing salts to offset the body's increased production of acids when it works at increased tempo under the summer sun

Milk is at its richest in food values in summer when the cows live out of doors, containing more vitamins A and D, and it is one of the best foods to take freely Eggs, too, are better food value where the hens are on free range Cream cheeses and dairy products are ideal summer fare

Keep Active

Tempting as it is to laze about and move little on hot days, it has been shown that activity is better for the body, provided that the water and salts intake is sufficient for the body's needs When you are active, you perspire more but the blood is also cooled more, and the body benefits from the increased flow of perspiration This does not mean you should go suddenly rushing about in the sun, or engage in a bout of extraordinary activity, as too many all too often do on holiday It means that you should accustom your body to activity first, and not do too much at any one period

Cold water plunges and swimming do not necessarily cool you in the best way The cold water may cause blood to retreat from the surface of the body and prolonged time in the water may result in headaches and gastric sickness It is best not to over-do cold water bathing on hot days, and to rest in warm shade afterward, rather than in full sun

Your clothing will affect your ability to keep cool and fit in hot weather Natives in the tropics have long known that their best dress is little or nothing, since this permits the maximum of evaporation from the skin to take place For tropical living, the white man has always found short trousers and short-sleeved shirts more comfortable than full clothing But the Arab of the desert exposed to the full fierce and direct rays of the sun has learnt that loose, flowing, light-coloured robes are best

Under temperate conditions, experience shows that the emphasis should be on light, loose, porous

(Continued on p 24)

A Famous American Physician Gives Advice on

HAY FEVER

JONATHAN FORMAN, M D.

No matter when your hay fever strikes—or why—here's relief for you!

PEOPLE who suffer from hay fever whether in spring, summer or autumn, ponder the mysteries of hay fever as they sneeze, blow their noses, and wipe their itching eyes. They wonder why it is that of all the thousands of species of flowering plants only such a few produce pollen that actually can cause hay fever.

"What is it," they ask, "about the pollen of a plant or tree that makes it capable of sensitizing the lining of some noses and thus producing hay fever?"

There are, as a matter of fact, several requirements a pollen must meet before it can qualify as a cause of hay fever In the first place, in order to arrive in the membranes of the nose of a person who is or can become allergic to it, it must be light enough in weight to fly through the air on wings of the wind It must be air-borne, not like the insect-borne pollens, which can reach the nose only by direct contact They are limited to gardeners, florists, and the flower lovers who continually stick their noses into their flowers This requirement of lightness in weight immediately eliminates the great majority of flowering plants and trees

Now, if any certain wind-borne pollen is to play a real part in causing hay fever, it must be produced in sufficiently large quantities near enough to the patient to be effective This means, of course, that this particular pollen must also be widely and abundantly distributed if it is to be of any considerable importance in the community This requirement at once rules out many more plants and trees as likely causes of hay fever in a particular case

In early spring, when the trees bloom, some of them, notably maple, elm, sycamore, ash, walnut, and cedar, do satisfy all these requirements

Persons who become allergic to tree pollen in general have "a spring cold," lasting for ten days to two weeks A few of such patients may develop asthma, which is the same allergic process moved down into the windpipe

Hay fever as it occurs in Europe and the British Isles in May, June, and early July is more nearly true to name, because it is usually caused by grass pollens Inasmuch as the agricultural grasses—hay and cereal grains—are necessary to the very life of our people, no hay fever prevention programme that has for its objective the destruction of weeds can include these grasses Not only do these grasses all produce a highly antigenic, wind-borne pollen, but they are widely and richly distributed

Among the autumn weeds causing trouble, are the nettle and plantain

Let us consider a patient who has typical spells of hay fever at the same time each year He has had several positive skin tests for pollen sensitivity We must now correlate the pollination season of the flowers tested with the date on which the symptoms appear in our patient If they coincide, we can be quite certain theirs are the offending pollens

Occasionally, however, we find that the pollen of plants in full bloom when the patient says that he has his hay fever does not give positive tests If this happens, we must stop and check up on all our data. It is possible that his hay fever symptoms are not due to allergy to any pollen He may be

allergic to foods he gets only when they are in season in his locality. New potatoes are among the most frequent offenders, and they just happen to come in with the weeds.

Dr. Feinberg has reported an interesting case of severe hay fever during dog days that turned out to be due not to weed pollens at all It was caused by the excessive use of bath and body powders containing orrisroot by an obese patient who took several baths a day only during these hot days in the autumn

Before we give up on such a case we ought to test with more active extracts of the suspected pollens or, better, blow some of them directly into the nose

Building Up a Tolerance

It is always best to try to gain complete tolerance for the pollens proving to be irritating, by taking carefully graduated injections of them Occasionally we meet a person who has a prejudice against shots To him we can say The materials used for the injections are not serums or vaccines They are only extracts of pollens the patient is bound to absorb in the next blooming season He cannot avoid taking this same material into his system in the same amount as the injections, or in greater amounts During the pollen season every man, woman, and child absorbs large amounts of these same pollens into their bodies The patient is going to take this treatment material into his system whether he wants to or not

Would it be best to do it gradually beforehand, gaining a tolerance such as other people have, than to wait and undergo the shock of having it literally dumped into his blood stream without any preparation? If he takes it slowly in carefully graduated doses, he can build a tolerance, whereas if he waits and gets a huge dose all at once, he not only gets no tolerance but loses the small amount of resistance he has left from the last season. There is every good reason for taking the treatment and none for not having it.

The best time to begin these treatments for pollen hay fever and asthma is now, the sooner the better If it happens to be the middle of the season, properly planned treatment will give a lot of relief The longer the time before the season, the better the result as a rule Indeed, as Vaughan has said, "Now is the time to begin for year after next!"

You must understand clearly that the principle involved in this form of treatment is gaining tolerance If you were warned that you would be forced to take a fatal dose of a narcotic drug on a certain future date, you would prepare yourself by taking increasingly larger doses until you could tolerate more than the large dose at the appointed time The way to defeat the action of pollen on the body is to begin with a very weak extract and gradually increase the strength at *regular intervals,* and in this way increase your tolerance to the pollens that cause your hay fever or asthma

The amount of relief you will get during the next hay fever season will depend on the amount of tolerance you have gained and the amount of exposure you happen to be subjected to There is a quantitative relation between the amount of pollen breathed in and the degree of tolerance gained This tolerance will be inadequate, adequate, or more than adequate, and the relief will be accordingly. There may be no symptoms at all, or if the crop is unusually good, there may be a few days of trouble when the pollen crop is at its peak and the concentration in the air is heaviest At such times symptoms may develop for a few hours or a day Then the amount of pollen will return to a point below the tolerance, and the symptoms will disappear.

Here are some nursing rules to make the pollen-allergic patient happy and comfortable

1 During the season of your allergy, have no cut flowers of any description in your house

2 See that all weeds in the vicinity of your house are cut before they bloom and that they are kept cut, being done at least once a month Some pollens go several miles into the air and are blown as far as fifty miles or more across the country This precaution simply prevents your having a good crop just outside your bedroom window

3 Do not take long rides through the countryside, play golf, or otherwise over-expose yourself to the pollen You have a certain definite tolerance, and whenever it is not adequate to your exposure you will have symptoms

4 Avoid the factors that will indirectly bring on attacks—dusty roads, house cleaning, chill from swimming

5 Do not go into swimming pools or polluted rivers during the height of the season Take baths in a warm room in the morning rather than in the evening and in warm water—not hot—and be sure to dry off completely before leaving the bathroom

Besides the danger of chilling bringing on an attack of hay fever, there is always the danger of contracting an infection from a public pool, producing head colds or sinus trouble These added to hay fever lay the groundwork for permanent invalidism

6 It is to be remembered that getting heated and cooling off quickly may bring on an attack As unnecessary as it seems, hay fever victims must be cautioned continually against out-of-door sports during the allergy season.

7. For the patient who is sensitive to certain foods special elimi-

(Continued on p. 24.)

WATER TREATMENTS FOR FLU AND OTHER ACUTE FEVERS

FRED B MOOR, M.D

GRANDMA SEN fairly snorted her disapproval when young Mrs Sen informed her that the new doctor had advised that Bonerjee be given a full glass of water every two hours You see, Bonerjee only the evening before, had suddenly developed a fever of 104 F Grandma Sen did not "believe in all these new-fangled ideas about how sick folks ought to be treated" Hadn't she raised a family of ten, and didn't she know that children with fever should be given very little water? How many children had this young upstart boy doctor ever raised? Indeed, he and his wife didn't have even one child yet! Upon the insistence of young Mrs Sen, however, Bonerjee got a full glass of water every two hours along with the rest of his treatment Contrary to grandma's gloomy forebodings, Bonerjee rapidly recovered from his influenza, and she grudgingly admitted that the young doctor might not be so bad after all

If the doctor had been asked why he gave Bonerjee so much water, he would have explained that water is essential to the control of the body temperature at all times but that in presence of fever an abundant supply is especially important It helps to keep the fever at a more comfortable level by increasing perspiration, thereby prompting the elimination of heat from the skin On the other hand, it does not entirely eliminate the fever Such a result would be undesirable, since fever is regarded at present as a part of the defence mechanism of the body A large water intake dilutes the toxins of disease-producing germs and thereby lessens injury to body tissues and organs The doctor was right, the prohibition of water in fevers is a relic of the past Today the fever patient is encouraged to drink all the fluid, either water or fruit juice, that he will

The employment of water in the treatment of acute fevers is not confined to its internal administration Intelligently used, it is of great value when applied at various temperatures to the skin surface Water applied externally produces far-reaching effects upon the physiological processes

The use of cold baths increases the consumption of oxygen by stimulating the body fires to burn more brightly, in other words, they stimulate metabolism The cold bath also enhances the body defences by stimulating the white blood cells to increase in number and activity It tends to tone up the circulatory system and helps to overcome muscular weakness and fatigue

The hot bath also increases the oxygen intake and the number and activity of the white blood cells, but relaxes the muscles and the blood vessels Both hot and cold applications to the skin surface produce changes in the activity of such internal organs as the heart, the stomach, the intestines, and the kidneys In the treatment of fevers, the effects of hot and cold procedures upon the circulatory system and the white blood cells are by far the most important, since we are endeavouring to support the heart and the blood vessels in their efforts to maintain an adequate circulation and to stimulate the body defences

In 1860, Brand, a German physician, demonstrated the great value of the cold bath in typhoid fever Although his methods of administration of the cold bath in this disease have been considerably modified, cold pack and cold frictions, given under medical supervision, remain today among the most effective measures in the treatment of typhoid fever

One of our commonest fevers is influenza Uncomplicated influenza is not usually a serious disease if it is properly handled, but, on the other hand, it may be dangerous if, through careless management, complications develop The proper use of water in the treatment of this disease will greatly lessen the patient's discomfort by keeping the temperature at lower levels and relieving the severe aches and pains that usually occur We shall present in detail the treatment of this disease

When one finds that he has influenza, the first and most important thing to do is to go to bed and keep warm Most of the complications which occur in this disease are due to neglect of this one thing, bed rest In great epidemics, such as that of 1918 to 1920, when whole families were ill at the same time, bed rest for an adequate period was often impossible, and in many cases relapse with fatal broncho-pneumonia ensued Ideally, bed rest should be maintained until the temperature has been at the normal level for two or three days

Next in importance to bed rest in the treatment of influenza is an abundant intake of fluid in the form of water or fruit juice This is as truly a water treatment as water applied to the outside of the body The writer usually advises a glass every hour for adults and proportionately less for children

The diet also is liquid until the temperature returns to normal It may consist of soup, fruit juice, cereal gruel, and milk As fever recedes, a normal diet may be gradually resumed

The external use of water in this disease is aimed at reducing discomfort and at supporting the bodily defences Both these objectives can be attained with remarkably simple equipment The following is an outline of the various steps in a treatment which will be found exceedingly pleasant to the aching victim

1 Prepare or secure four fomentation cloths, 30 to 36 inches square from a cheap part-wool bed blanket Obtain a metal foot tub or pail of sufficient size to immerse the feet up to the ankles Provide a large basin or pan for ice water Have available about four large, coarse Turkish towels, two washcloths, and a pair of large, loose mitts made of Turkish towelling

2 Fill the foot tub or pail about two thirds of water at 105°F Place a Turkish towel on the bed under the tub and immerse the patient's feet Pass the upper bed sheet over and around the tub, being careful that it does not get into the water At frequent intervals lift the feet from the tub and add more hot water until the temperature of the foot bath approaches 120°F

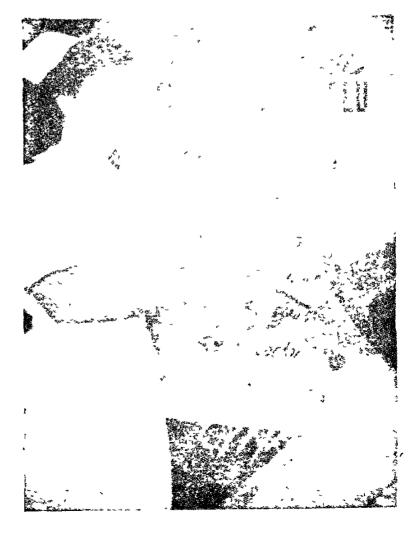
3 As soon as the foot bath has been started, apply the first fomentation and put a cold compress wrung from ice water on the forehead One fomentation should be applied the full length of the spine underneath the patient and another across the chest Fomentations should be applied as hot as the patient can tolerate without actually burning This is regulated by the number of towels used between the fomentation and the skin Each fomentation is left in place about three to five minutes, or until it is fairly comfortable, and is then replaced by another hot one. In each treatment three fomentations are usually applied to each area

4 As soon as the last fomentation is removed and before the feet are taken from the hot foot bath, a cold-mitten friction is begun One arm is bared and raised, the friction mitts are quickly wrung from ice water and drawn on the operator's hands The arm is rubbed briskly with short, quick strokes Begin at the shoulder and work toward the hand

After the two arms, the chest, the legs, and finally the back are treated in the same way The feet are not removed from the foot bath until it is time to give the friction to the legs In all these procedures, the bed is carefully protected from water by the use of Turkish towels The cold-mitten friction completes the treatment If desired, camphor liniment or some other counterirritant may be finally applied to the chest.

5 Important factors in a treatment of this kind are smoothness and speed in the procedure These are readily acquired with practice Such a treatment may be given once, twice, or three times daily as symptoms demand and as time permits

At the beginning of the influenza attack, an ordinary hot tub bath at 104°F for from ten to fifteen minutes is good for the relief of the aching head, back, and legs In the use of the tub bath, however, there is some danger of undue chilling in going from the bed to the bath-room It is, therefore, not as desirable as the treatment given in bed It also should be followed by a short cool spray or friction

A carefully executed programme such as that outlined above obviates

the need for pain-relieving and temperature-reducing drugs It is the writer's opinion that convalescence is more rapid and uneventful if drug therapy is omitted in influenza Certainly, drugs, if employed at all, should be given simply to relieve discomfort and not to reduce temperature

In none of the acute fevers should water treatments be used to the exclusion of specific measures, such as antitoxin in diphtheria, sulfapyridine or sulfathiasol or serum in pneumonia, or quinine in malaria But in these conditions water will be found an efficient helper

The use of water in the treatment of many of the acute fevers is simple and effective It can be successfully carried out in the home with simple equipment by someone who has been instructed in its use It should not be considered a cure for everything

A BOY MEDICAL HERO

ALAN A BROWN

Leonard Thompson, a young boy given up to die from diabetes, was the first patient to receive an injection of insulin

THE history of medicine records that the first administration of insulin for the successful treatment of diabetes was given on January 12, 1922, to Leonard Thompson, fourteen years of age, by Dr Frederick G Banting and Dr Charles H Best Thus was solved a problem that had puzzled doctors for two thousand years Before the discovery of insulin, the chances for survival of a patient with diabetes, even under the best treatment then available, were not too good Insulin has brought life to the diabetic It enables him to live and grow strong It is one of the major medical discoveries of this century

Diabetes is a condition in which the patient fails to get the benefit of the food he eats, particularly the sugar and starch This happens because the pancreas produces an insufficient quantity of a substance called insulin As a result the body cannot store or use carbohydrates normally, and sugar accumulates to excess in the blood, from which it is removed and excreted through the kidneys.

In 1920, Banting, a young orthopaedic surgeon, opened an office in London, Ontario, Canada His debut was hardly a success He kept office hours faithfully and regularly for twenty-eight days before he had a patient and, at the end of the first month, found that he had earned exactly four dollars! In his spare time he worked as a demonstrator of physiology at the medical school of the University of Ontario

Banting was an avid student He became aware of the plight of the diabetic, and before long was so engrossed with the problem that he closed his office, sold his instruments, and went to work in a laboratory at Toronto He was told he could have a medical student to assist him in his research Two students applied The choice was made by the toss of a coin. Charles H. Best, a second-year medical student, won and thus started on the road to medical immortality.

Banting and Best encountered many disappointments, but had enough success to make them hopeful, to make them feel they were on the right track. Finally they got results—wonderful results They had prepared an extract of the pancreas, largely composed of the tissues of certain cells in the gland They used this extract experimentally on dogs, and were wholly successful in this venture The supreme test was yet to be made—whether this substance, insulin, would be effective in human patients

Banting, understandably, wanted the credit of being the first to administer insulin to a human being Best prepared the extract In Toronto General Hospital they found fourteen-year-old Leonard Thompson, underweight, dull, and pale Other doctors had lost hope of saving Leonard, so Banting and Best selected him as their first patient They started treating him with insulin on January 12, 1922

Within three weeks every doctor who had observed the case was willing to certify that Leonard Thompson had been snatched from the grave He looked bright, was more active and stronger than he had been for a long time. He went on to buoyant health, living proof of the great life-saving value of insulin

The success of the practical application of insulin exceeded all expectations In recognition of their investigation of diabetes and the discovery of insulin, Drs Banting and Best were awarded the Nobel prize. The name of Leonard Thompson, a hero of medicine, is inscribed alongside theirs in the annals of medicine Because of insulin the diabetic is no longer doomed to weakness, illness, and early death Leonard Thompson is indeed a hero to every diabetic patient!

HOMEMAKERS' HELPS

RECIPES

Divinity Fudge

Two and a half cups sugar; ½ cup white syrup, ½ cup boiling water, ½ cup ground chocolate; 2 egg whites, salt, 2 teaspoonfuls butter, 1 teaspoonful vanilla, 1 cup chopped walnut.

Mix sugar, syrup, and hot water, and boil to 236° F. or soft ball stage. Add chocolate and let melt. Beat egg whites until stiff and almost dry. Add salt while beating. Beat 1 [illegible] of cooked syrup into egg whites. Cook the remainder of the syrup to 270° F. and add to egg whites. Beat 2 minutes. Add butter and beat for 3 minutes. Add vanilla and nuts. When mixture piles up in ribbon fashion and still has a glossy look, pour into buttered pan.

Samose (Sweet)

Two cups of whole wheat flour, 1 coconut, 1 cup brown sugar, 5 pods of cardamon

Make a thick dough, roll into puris about 3 inches in diameter. Mix the scraped coconut, brown sugar and crushed cardamon and put 1 tablespoonful on each puri. Fold, press the edges and fry in deep oil or ghee.

Cream of Barley Soup

Two-thirds cup unpearled barley, 1 chopped onion, 3½ pints water, 1 pint milk, 3 tablespoonfuls chopped parsley, 3 teaspoonfuls salt.

Soak the barley overnight, drain well. Boil onion and water, drop in barley, cook gently until very soft. Add milk and parsley. Boil up, add salt and serve. If preferred, portion of the barley may be pressed through a sieve to make thicker. Makes 3 pints.

Potato and Sago Soup

Three tablespoonfuls sago; 8 ozs. potato; 1/3 cup powdered milk; ⅝ cup tomato puree; 1½ teaspoonfuls salt.

Drop the sago into ½ pint boiling water, and cook until clear. Put the potato on in 1¼ pint cold water, cook, mash smooth and add to sago. Blend full cream powdered milk in little tepid water and add to pot. Heat tomato puree, beat slowly into soup, but do not allow to boil. Salt to taste, and serve. Makes 1¼ pints.

Brinjal Curry

***Four medium sized brinjals,* cut in pieces, 1 tomato, minced; 1 tablespoonful green coriander, chopped, 1 onion, minced, ¼ ground coconut, 1 teaspoonful coriander seed, ground, ¼ inch turmeric, ground, 4 cloves of garlic, minced or ground, salt to taste**

Take two tablespoonfuls of fat and put in a saucepan. Add the minced onion when fat is hot and saute for a few minutes. Add the massala and saute again a few minutes. Add the minced tomato and the coconut. Finally add the brinjals and cook until brinjals are tender. Stir to keep from scorching.

Imperial Cream Soup

One cup strained tomatoes, 2 cups water, 3 tablespoonfuls flour, 1/3 cup heavy cream, 1 teaspoonful salt, 1 bay leaf; ½ teaspoonful powdered thyme

Heat the tomato and water with the bay leaf and thyme to boiling. Stir the flour smooth with the cream and whip it into the boiling liquid. Add the salt and remove the bay leaf before serving.

Cream Lima Bean Soup

One cup dried Lima beans, 1 cup milk, 1 tablespoonful butter substitute, 1¼ teaspoonfuls salt

Wash the beans and soak them in cold water overnight. In the morning drain off the water in which they soaked, and put the beans to cook in fresh cold water. Simmer slowly for at least three hours. Long cooking of beans or peas for soup is necessary to cook them to a pulp that will remain suspended in the soup instead of settling to the bottom. Rub the thoroughly cooked beans through a colander. Add the milk, butter, and salt, and water to make one quart of soup, and reheat in a double boiler. The milk may be omitted and two tablespoonfuls butter substitute used.

This recipe may be followed in making soup from other kinds of beans.

Candied Sweet Potatoes

As many potatoes as desired; salt to taste; butter substitute, brown sugar syrup.

Boil medium to small potatoes in their skins. Remove the skin, place the potatoes in an oiled pan, sprinkle with salt, brush them over with brown sugar syrup and with butter substitute, using a little more of the syrup than just enough to brush over the potatoes; let there be a little in the pan, then brown in the oven.

To make the brown sugar syrup boil one cup brown sugar in one fourth cup of water till the sugar is dissolved.

Carrot Cutlets

One cup boiled, mashed carrots; ¼ cup raw, minced onion; 2 cups boiled rice; 2 well beaten eggs, ½ cup White Sauce, 1 cup or more bread crumbs; salt and butter to taste

Combine the carrots, onion, rice, 1 egg and white sauce. Season. Shape into cakes. Dip into crumbs, egg, and crumbs again. Fry until delicately browned on both sides. About 6 servings.

White Sauce

Two tablespoonfuls flour or cornstarch; two tablespoonfuls butter, milk, light cream, or vegetable water for the liquid.

Melt butter and stir in the flour gradually. Stir in liquid and continue stirring until mixture boils and thickens. Add seasoning.

Brinjal Molee

Two brinjals; 1 medium-sized onion (finely sliced); 1 clove garlic (finely sliced); 2 or 3 green peppers cut lengthwise; 6 thin slices of green ginger; 1 teaspoonful ground turmeric; ghee or butter; coconut milk.

Cut the brinjals into fairly thin slices. Rub them on both sides with the ground turmeric and a little salt. Then fry (but do not brown) them in ghee or butter. Drain.

Into a saucepan put in some fresh

ghee or butter and fry in it the onions, garlic, pepper and ginger Cook until onions are fairly well done, but not brown, and then add about ½ pint of thick coconut milk Warm through and add the cooked brinjals, a little more salt if necessary, and simmer until the sauce thickens Serve slices of lemon with it

Caramel Custard—Baked

Half cup sugar, 1 pint milk, 2 eggs, vanilla, pinch of salt.

Melt sugar to a light-brown syrup, in a saucepan over the fire Add scalded milk very gradually and cook until free from lumps Pour this gradually into the slightly beaten eggs Add the flavouring and pour into custard cups Place cups in pan of hot water, and bake in a moderate oven (350° F) until firm Test for sufficient cooking by inserting a knife into the custard, if it comes out clean, the custard is done Do not let the water around the cups boil Serves 6

KIDDIES' KORNER

DISOBEDIENT DAISY

Mrs. J. Craven

THE holidays were over, and Daisy and Ranju were getting ready to start off for school one Monday morning

Ranju had been at school for three years, so she was not really very excited at the thought of going back, but this was to be Daisy's very first day there, and she could hardly wait to get going

They lived about ten minutes' walk from the school, and had a busy road to cross, so Mummy gave them some last minute instructions

"Mind you wait at the crossing until the road is quite clear before you go over," she said "And Daisy—never come home alone Always wait right by the school door for Ranju"

She kissed them good-bye, and off they went

The day seemed to pass by quite quickly for Daisy She had a very kind teacher who did her best to make her little pupils feel happy, but all the same, she was glad when it was time to go home to see Mummy again Ranju came out of school a little later than Daisy, but she remembered Mummy's instructions, and waited patiently for her to come

All went well for several days, but one afternoon Daisy grew tired of waiting for Ranju and decided she would go off home by herself She was quite sure she knew the way

She started off up the road She felt very important to be walking along all by herself Presently, a little school friend came running up behind her and walked along with her When they came to the top of the road Daisy was about to take the turning which led to the main road where the busy crossing was, when her little friend said, "Come home with me first, Daisy, and see my lovely little white kitten"

Daisy knew that she ought not to do this, but the thought of cuddling a fluffy, white kitten was too good, and so she went

She had been playing with the little kitten for some time, when she thought of Ranju and how she would love him too Then she began to wonder if Ranju had reached home yet, and how worried Mummy would be, finding that she was not with her She decided she had better say good-bye to her little friend and the pussy-cat, and finish her journey home

She started off again, but now she was in a strange road She went to the end and turned round the corner She walked on a little way and turned into another road which she hoped would be familiar But, no, she was more muddled than ever She realized she was lost, and then she began to cry How she wished she had obeyed Mummy and waited for Ranju

Suddenly, she thought of the story which Mummy had told her at bed-time the night before It was about the little lost sheep and how the Good Shepherd left all His other sheep and went and searched for it until He found it So Daisy thought that perhaps if she asked Him He might help her to be found "Dear God," she sobbed, "I've been naughty and I'm lost Please find me"

She wandered sadly up the road, when, all at once a little boy about her own age came running out from one of the houses, followed by a kindly looking lady The lady stopped and spoke to her

"Why are you crying, little girl?" she asked

"Because I'm lost and I don't know my way home," said Daisy, *through her tears*

"If you can tell me where you live, perhaps I can help you," *returned the kind lady*

Daisy told her the name of the road where she lived, and the number of the house

"Why," said her new-found friend, "that is the very road we are going to Come along with us and you'll be quite all right"

As they walked along together Daisy dried her tears and explained just how she had got lost and how she had asked God to find her She was quite sure that God had answered her prayer and sent the kind lady to help her

Meanwhile, Ranju had searched everywhere at school for her little sister, and being unable to find her, had run home as quickly as she

could, hoping to find her there. Both she and Mummy were greatly alarmed at Daisy's disappearance, and Mummy at once got ready and set out to look for her. She told Ranju to stay at home in case Daisy should get back while she was out.

She went down the front path and turned out into the road. She had gone only a short way when round the corner came Daisy with her good friend. When she saw Mummy she ran up to her and began to tell her just what had happened. "And Mummy," she finished, "I'll never be so naughty again."

Mummy was very grateful that Daisy was found, and thanked the lady for her kindly help, and asked her to bring her little boy sometimes to play with Daisy and Ranju.

Daisy wondered what punishment she would receive for her disobedience, but Mummy thought she had been punished enough, and felt quite sure that Daisy would never again decide to come home alone.

And she never did.

HAY FEVER

(Continued from p. 17.)

nation diets must be planned. For the rest of their diet they should have plain, simple foods, not too rich. Always make the noon meal the heavy one of the day and the evening meal a light one. Be sure not to eat any of the foods you are allergic to, and during your allergy season avoid celery, tomatoes, chocolate, cucumbers, melons, and potatoes unless you are certain that none of these offend.

8. Keep the windows of your sleeping quarters closed all the time, so that the pollen in the room will settle to the floor, then be careful not to stir it up when you go to your room. With the windows closed you also avoid the cooling of the room, which in itself often brings on an attack. Then, too, the air at sunrise is richest in pollen. Do not sleep in draughts or on a sleeping porch. If the windows must be kept open do not allow cross ventilation. A wet sheet hung one foot inside the open window will stop some of the pollen—sometimes enough if your tolerance has been raised to nearly adequate level.

If the windows are kept closed, the air may be kept in circulation by means of an electric fan. A fan will add to your comfort. However, it should not be directed toward you, the floor, or any object likely to give off dust. The windows should be closed in the daytime as well as at night, to keep out as much pollen as possible. Window filters and air-conditioning machines are effective unless they cool and dampen the air too much.

Our rule, with which many other allergists agree, is to carry out a year-round programme of injections of the offending pollen until there have been two consecutive years without trouble. Then two months after this last injection the patient is tested. If negative to dry-pollen scratch tests, he is discharged, with instructions to carry out the fore-going nursing rules during the next three or four years. I myself have released more than fifteen hundred victims of hay fever, and only a handful have had a recurrence of it.

KEEPING COOL AND FIT IN HOT WEATHER

(Continued from p. 15.)

and absorbent clothing. For most of the year, we wear clothes to insulate the body against cold. In summer, by choosing white and light garments we can protect the body against gaining heat, since the lighter colours reflect it. But in order that the body may be efficiently cooled by the rapid vaporization of its sweat, clothing should be as loose as possible so that air can circulate to ventilate the skin.

To keep cool during hot weather not only adds to our comfort, but by making it possible for the body to function properly, it keeps us well.

DO YOU NEED GLASSES?

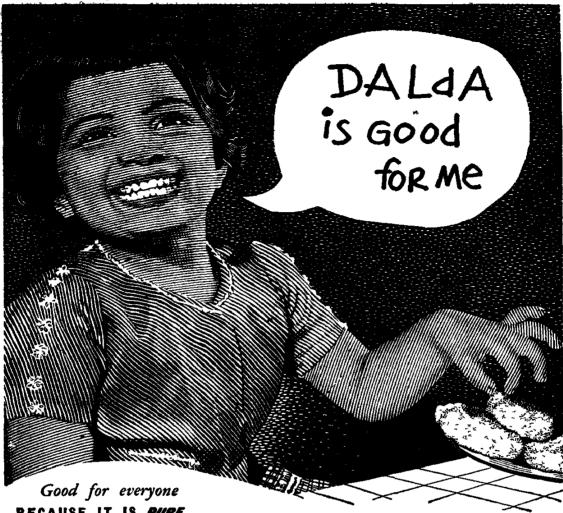
(Continued from p. 13.)

Stories on how a certain person's eyes were benefited by this or that plan are legion. For example, we may hear how Johnny took off the glasses prescribed by his doctor, for he was taken to a technician who improves the eyes by means of drills, and now Johnny can get along without his glasses.

That sounds wonderful but, just like anything else, it may turn into quite a different story when all the facts are known. What about Johnny now? Does he have eye-strain now that he does not wear glasses? Remember, a child does not complain of eye-strain as such very often, especially when he knows that he may be asked to wear his glasses again.

It takes special training to evaluate and treat one of the most precious gifts we possess, our eyesight, and many people who advertise improvement of vision without glasses or medicine have had no recognized training. Since they are not licensed to practise a healing art, they are not permitted to prescribe glasses or medicine, even if they should have the desire to do so.

There are other questions that require an answer before forming judgment. What is Johnny's vision now? Children seldom complain of blurred vision, often it is discovered only by accident. How about his muscle balance—the working condition of the muscles that direct the eyes in looking from one object to another?

All these questions must be answered before passing judgment

on a given case, yet some people who have never studied them claim to be able to give advice even though it may be contrary to all the established facts

It is best to avoid questionable procedures. They are often expensive not only in terms of money but also in other ways You might as well save your time and consult an eye physician in the first place, since you have to see him ultimately anyway Eye physicians are willing and eager to accept any method in the treatment of any eye condition, provided its value has been proved But it is also their duty to warn the public against improper remedies in a field where it is very easy to be misled

THE DOCTOR SAYS

CURLY HAIR Ques "Is there a tonic or treatment that will make hair naturally curly?"

Ans —Whether the hair is curly or not depends on the structure of the hair itself Perfectly round hair is straight but if the shaft is oval, it will curl There is no tonic or medicine that will make the hair naturally curly, but hair dressers can periodically put a wave in the hair that will last until new hair grows out

?

BREATHING EXERCISE—LUNG COMPLAINT Ques —"In the August issue of the HEALTH I read an article on exercises for correct breathing I followed the exercises suggested for about two or three days when I developed a pain in my chest Will you please tell me what the possible cause of this may be"

Ans —You may have some lung complaint, which causes the pain when you take deep, breathing exercises If you are running a temperature or coughing up sputum, you should have a chest examination Otherwise, I would continue the exercises and the pain should go away in time

?

DOUBLE PALATE Ques —"My dentist says I have a double palate Is this the same as a cleft palate? Three of my children have double palates, they did not talk clearly until they had speech lessons in school The other two, with normal palates, had no difficulty in talking clearly Is there any way I can help my three year old son enunciate intelligibly?"

Ans —The term "double palate" is not often used Sometimes a split uvula (the soft palate) is spoken of by non medical people as a double palate But it is a double uvula, and does not interfere with talking, as a cleft palate can

Since the special lessons in speech helped your children to speak more clearly the condition cannot be serious Perhaps there was some emotional situation in the home atmosphere Failure to talk is often caused by tense and nervous conditions in the home which have a severe effect

I believe you should not take too seriously the fact that your three year old does not talk too clearly Be gentle with him Laugh and have fun with him If you cannot make out what he is saying, simply give him an extra hug and kiss and love him a lot Don t try to make him talk plain Just try to understand and I am sure in most cases you will be able to If he is not made nervous he will make a point of learning to talk well

?

AMOEBIC DYSENTERY Ques —"I suffer with amoebic dysentery I have had this for about six months The doctors have advised Emetine injections However, I have been under Homœopathic treatment and there has been a slight improvement Please let me know if this dysentery is curable and what treatment is most effective"

Ans —Amœbic dysentery is curable in most cases Sometimes treatment must necessarily be prolonged It is possible while taking treatment or afterwards to become re infected, which in many cases is why some folk think that the treatment was no good Emetine was one of the most effective drugs in the treatment but it is dangerous and should be given while the person receiving it is in a hospital I use Emetine occasionally, but prefer the following treatment for most cases

Viasept 50 mgms three times a day for 8 days with Nivaquine one tablet daily for 20 days For more severe cases we sometimes find it necessary to give one Terramycin capsule every six hours for 8 days but this is quite expensive

MAKING READY FOR THE BABY

(Continued from p 7)

For some persons five small meals a day are more suitable than the usual three large ones Foods which have a tendency to upset the digestion in any way should be strictly avoided If there is a history of allergy in the expectant mother, she should have in her diet a wide variety of foods and avoid eating largely of any one food, as it is possible to sensitize the baby before birth to some food which later on may cause him difficulty

A few *do's* and *don'ts* may be listed concerning exercise and rest

The expectant mother should get an added amount of sunshine and out-of-door exercise, of which walking is the very best, she should avail herself of every opportunity to be out of doors It is of vital importance that she avoid extra work, heavy lifting, long rides, much running up and down stairs She should have a rest period of about an hour in the morning and the same in the afternoon If such long periods of rest cannot be taken, a few minutes' relaxation between duties may suffice Late hours and becoming over-tired are to be avoided, and she should get at least eight hours of rest at night

The elimination requires special attention, but a cathartic must not be used except on the advice of the physician An attempt should be made to regulate the elimination by proper diet and exercise Daily sponge baths, with a tub bath about twice a week, will keep the skin in good condition Very hot or very cold baths are to be avoided

Clothing made so that the weight rests on the shoulders rather than the waist is the proper type to be worn High heels throw the weight backward and cause strain on the lower abdominal and back muscles, also, they are unsafe, as they may

be the cause of a fall which will injure the mother or the baby. Shoes a little larger than the size usually worn will ensure comfort during the latter part of pregnancy, when the feet may swell a little

Clothes for the new baby are planned early, so that there will be no hurry or confusion later on. Each mother has her taste and limitations to guide her in the selection of these clothes, but the small baby is just as contented and healthy in clothes that are plain and simple, and he is just as lovable, as if a great display of frills and dainty laces and ribbons be found in the layette And the mother will have less work to do in keeping her baby clean and the clothes laundered Here is a list of the necessities for the baby

- 3 dozen diapers
- 3 soft flannel bands, 6 inches wide, 27 inches long
- 3 cotton shirts, size 2
- 3 flannel petticoats
- 1 muslin petticoat (white)
- 6 slips or dresses, 25 inches long
- 3 nightgowns of outing flannel
- Stockings
- 2 baby blankets and 4 sheets
- 2 soft wash-cloths and towels
- Rubber sheet or oilcloth
- Bed and mattress
- Tub for bathing
- Mild soap
- Plain talcum powder
- Boric acid, crystals or powder
- Toothpicks, cotton wool
- Medicine dropper
- Tube of vaseline
- 2 dozen safety pins, two sizes
- Bottles and 3 nipples

The selection and arrangement of the room for delivery and convalescence is much the same as for sickness, with the exception of the actual delivery hours A room that is sunny and bright is best All unnecessary furniture and heavy drapes should be removed For the floor, just small scatter rugs are best, as they can be removed and cleaned. Of course, during the time of delivery these will be rolled up and removed from the room After thoroughly cleaning the room, arrange the bed so that both sides are free. If it is low, blocks about four by six inches square and about seven to eight inches high may be in readiness to be placed under the legs of the bed If the mattress sags, a few boards under it will make it flat during labour The lighting should be arranged so that the rays fall on the bed The other furniture for convenience, with all trinkets and unnecessary articles removed from the tops of tables and dresser The nurse and the doctor will take care of the actual delivery set-up when they arrive, but these items should be in the home ready for the delivery

- 2 nightgowns, old
- 1 pair clean stockings, white
- 1 pair underdrawers, old
- 2 yards of unbleached muslin for abdominal binders

1 dozen towels, 3 wash-cloths
3 or 4 sheets
1½ yards rubber sheeting or oilcloth.
2 lb cotton wool
5 yards gauze, sterile
1 bed-pan
2 hand basins
Plain soap
Bottle of Lysol
Large safety pins
Armful of *clean* newspapers

There are a few symptoms which should be reported to the doctor at once should they occur at any time during pregnancy These are obstinate constipation, recurring headache, dizziness; blurred vision or spots before the eyes, puffiness of the face, eyelids, feet, or hands, scanty urination, abdominal pain, nausea and vomiting that persist after the third month, or any show of blood Taken in time, such symptoms may be checked and harm may be avoided, but unheeded, they may spell the loss of a child, or the beginning of serious complications for the mother Any annoying symptom should be reported at once

The doctor will instruct the mother-to-be when he wants to be called, but he will want to be notified when labour begins, which may be a few days before or after the expected date The nurse who has been selected will also be notified of the beginning of labour If there are other children in the family, they should be in another part of the home, or out of doors, under the care of someone in whom the mother has confidence; or better still, temporarily cared for by friends or relatives to relieve the mother of anxiety as to their welfare. Arrangements for the care of the children will have been made by the mother and father prior to the on-coming event

It is always interesting to speculate regarding whether the baby to be is a boy or a girl, and if this could be known, it would be most helpful in deciding upon a name and in the selection of colours and other items, but up to the present time there are no practicable means known of determining the sex of the child before birth. Often the mother is anxious to know whether twins may be expected

There are various ways in which the doctor may tell from examination whether there is more than one baby present, but the most accurate means of determining this is by X-ray It may be of interest to give here the frequency with which multiple births occur Statistics show that twins are born in one case in 87, triplets, one case in 1,100, quadruplets, one case in 757,000, and quintuplets, one case in 41,600,000 Up to 1937, when the Dionne quintuplets were a little more than three years old, there were on record 35 cases of quintuplets The cause of multiple pregnancies seems to be unknown, but it is thought that heredity bears a strong part

We have touched only the high points in this most interesting and important subject, but those who seriously and wisely plan the building of strong and healthy babies, and meanwhile strive judiciously to preserve the physical and mental health of the mother, will find generous dividends awaiting them

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BUILDING A HAPPY HOME

(Continued from p 11)

human baby It takes much more to train a child than it does to train a kitten or a pup. The presence of a child seems to sweeten and refine our natures and to remove the roughness from our personalities

Husbands, recognize that your wives are human beings, with feelings similar to your own. They need encouragement and help and, above all, love Wives, keep yourselves neat and well-dressed. Remember that order and cleanliness are [illegible] the home. A dull, unhappy home breeds disease and death. Keep yourselves cheerful. Fill your mind with lovely thoughts. Avoid all hatred and unnecessary worry. Be generous, give much, but expect little. Sing often. Pray every day Fill your lives with love for others, and you will find that your kindness will return to you in double portions Your whole lives will be enriched and sweetened as you learn to do unto others as you would have them do unto you These are the golden steps that lead to a truly happy home

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DEATH IN THE BOTTLE

(Continued from p 5)

" 'Now don't you go worrying your pretty head about Dorothy' I replied lightly, although my heart had turned leaden at her news, 'Dorothy has promised me she won't take anything to drink, and you can depend on her word.'

" 'Yes, I know, Ben,' my wife replied, 'but ever since poor Roger ' Her eyes filled with tears, and she was unable to continue.

" 'There, there now, Barbara,' I consoled, 'Dorothy's a girl, but her character's a lot stronger than Roger's was I can wager every cent I've got she'll keep her promise So dry your eyes and stop worrying or I'll turn you over my knee and spank you.' "

"I tried to dismiss the topic from my mind, but try as I would, my mind continued to be filled with thoughts of my poor dead alcoholic son and with half-formed dread for my daughter The hour was becoming late, but I just couldn't face the prospect of countless sleepless, tossing hours in bed. I decided to read, and picked up a detective story. I don't know how long I sat there, but I must have dozed off, because I was suddenly brought back to reality by harsh jangling of

the telephone. Never will I forget the message that reached me over the wire that night.

" 'Is that Mr. Curtis,' a man's voice asked. I replied that it was, and my informant continued, 'This is Sheriff Thomas of Dallas, and I'm calling from my office here. I'm afraid I have some bad news for you, Mr Curtis' At this point my heart felt like a heavy leaden weight in my chest, and the rest of the Sheriff's words became a blur only one or two phrases emerging from the jumble. 'Your daughter Dorothy . . in the morgue . identified by name on wrist watch high-way accident!'

"The phone slipped from my nerveless hand and clattered to the floor I sat dazed and uncomprehending by the telephone for what may have been minutes or hours Suddenly the mists cleared away from before my eyes, and I looked up to see my wife regarding me silently with a pale, grief-stricken face

" 'It's happened, hasn't it, Ben?' she whispered hoarsely, before I could tell her anything I nodded dumbly, too overcome by emotion to form any words

" 'You have to be brave, Barbara,' I began; 'Dorothy has met with an accident and '

" 'Tell me, Ben, she's dead, isn't she?' my wife asked brokenly 'We'll never see her again on this earth, will we?' She began to weep softly, and I turned my head away, unable to bear the sight of her over-powering grief.

"Suddenly a tremendous and insensate rage seized me First my son and then my only daughter had been taken from me, and the cause of it had been booze. I ran from the house to the car, got into my station wagon, and began a wild ride to Dallas I remember very little indeed of that trip in the small hours of the morning, but I still recall looking down at the pale, still form of my beloved daughter as it lay on that morgue slab. Strangely enough her features were unmarked, but a slight oozing of blood from her nostrils and ears told the tale of a lethal skull fracture.

"As I stood grief-stricken in that cold and silent room, I swore a mighty oath to spend the rest of my life fighting the booze that made such things possible For there was no doubt in my mind that it was because of her escort's drinking that Dorothy's young life had ended. My heart filled with bitter thoughts of her escort, who had placed his own selfish pleasure and enjoyment before concern for her safety.

" 'Where's young Rodney Potter?' I asked Sheriff Thomas, who stood at my side

" 'He's over in the hospital and in a very critical condition,' replied the sheriff; 'in fact, it's a toss-up whether he pulls through or not. Got a badly fractured skull and internal injuries.'

" 'Tell me just one thing, Sheriff, I asked grimly 'Had they been drinking when this happened?'

"The sheriff paused a few seconds before replying

" 'Young Potter had,' he finally said slowly, 'but your daughter didn't touch a drop as far as we've been able to learn'

"I stumbled back out into the night and began the long drive back home My jangled nerves cried for relief, but I knew that sleep wouldn't come easily From a habit of many years, I began to think of the temporary peace a slug of whiskey would bring me As soon as I reached home, I stumbled from the car and staggered wearily into the living room Once there, I quickly opened the cupboard where I had kept a bottle of whiskey for many months It wasn't there! In its place I saw a slip of white paper Seizing it, I read the following

" 'Rodney forgot his bottle, Dad, so we borrowed yours for the night. Don't worry, I won't take any of it.'

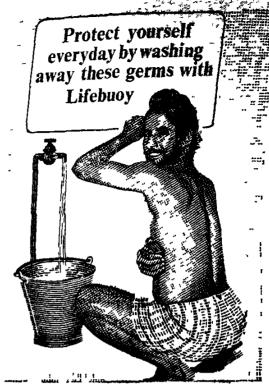
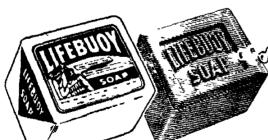
"The note was signed 'Dorothy' "

JESUS WILL RETURN

(Continued from p 34)

lords "The nations shall see and be confounded at all their might." Micah 7·16

God knows the future. He knows that there are many of earth's inhabitants who wish to live in peace and security, and to let others live. What is more reasonable than for God to issue a call to all such men, gather them together, thoroughly test them, sound their motives: and if they are found to be genuinely con-

cerned about life, and willing to abide by the rules governing peaceful intercourse among men, remove them from the trials and turmoil of earth and take them to a better land where all may begin anew? This is exactly what God will do

This is one reason why all earth's inhabitants should be vitally interested in the coming of the Lord For it is then that this new rule will be inaugurated God is now calling men from everywhere to join the forces of right and justice, men who will die rather than do evil, who will "follow the Lamb whithersoever He goeth." These will have learned the art of living, the art of adjustment; the law of kindness is in their hearts, they keep the commandments of God and the faith of Jesus; such will at last stand upon the sea of glass

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Men Who Proved the Bible True—No. 3

UNEARTHING HISTORY IN THE LAND OF ABRAHAM

W L EMMERSON

IN SEEKING to gather together, within the compass of this brief series of articles, the many spectacular discoveries which have so wonderfully vindicated the trustworthiness of the Bible record, we could proceed chronologically, listing the discoveries as they were progressively made Alternatively, we could group them geographically in the several lands of the Bible Perhaps, however, the most helpful way will be to discuss them in their historical order as they relate themselves to the developing story of Israel, the chosen people of God

So we will go first to Northern Mesopotamia, where the first archaeological light was shed upon the accounts of Creation and the Flood at the very beginning of the Bible

LIGHT ON THE CREATION AND THE FLOOD

It was in the forties of last century, following the pioneer work of C J Rich at Nineveh, that serious digging was begun on the sites of the great cities of Assyria by the Frenchmen, Paolo Emilo Botta and Victor Place, and the English excavators, Sir Henry Layard and his close companion, Hormuzd Rassam, and later, Sir Henry Rawlinson

At first, interest centred upon the massive man-headed bulls and lions and the magnificent bas-reliefs which decorated the royal palaces of Nineveh, Asshur, Khorsabad, and Nimrud, as these provided striking museum pieces Large quantities of curiously marked slabs of clay, found during the clearing of many of the palace rooms, were at first thrown aside as worthless bits of decorated pottery When they continued to turn up, however, it suddenly dawned upon Layard that they were inscribed tablets from the royal libraries and temple archives.

As soon as their value was realized, instructions were given to the native diggers to preserve all that were dug up and eventually some 25,000 from Nimrud and Nineveh were transported to England When examined, these proved to be from the Temple of Nebo and the Royal Library of Ashur-bani-bal respectively This latter monarch, who reigned over Assyria from 669-626 B C, had indeed rendered a wonderful service to archaeology for, as one of the first great private collectors in history, he had gathered into his palace library a priceless collection of copies of ancient documents going right back to the days of the Sumerian civilization, from which it has been possible to reconstruct the story of the successive civilizations of Mesopotamia

In 1872, a young assistant in the British Museum, George Smith, by name, was in the process of sorting out the mass of Nineveh tablets, when he came across one which referred to a flood At once his interest was aroused, and when he had classified the associated tablets he discovered it to be an Assyrian flood story which revealed significant similarities with the Bible account

So sensational was this discovery that he was sent out with funds provided by an English newspaper, *The Daily Telegraph*—which incidentally also financed Stanley's search for Livingstone in darkest Africa—to find more tablets and fill in the gaps in the story In 1873 and 1874 Smith collected many additional tablets, which together with further finds at the British Museum, not only substantially completed the Deluge account, but also brought to light a substantial part of the Chaldean story of Creation

The thrilling discoveries of Smith in Northern Mesopotamia encouraged other excavators to prosecute a search for literary documents in the mounds of Southern Babylonia, the seat of the Sumerian civilization which flourished before the rise of Babylon, and between 1889 and 1900 the University of Pennsylvania expedition to Nippur was rewarded by the discovery of a great temple library, from which were recovered Sumerian accounts of Creation and the Flood dating from 2100 B C, or before the days of Abraham

CRITICS HASTY JUDGMENT REFUTED

When these epochal discoveries first came to the knowledge of the critics they, of course, jumped to the conclusion that the Hebrews had got their accounts of Creation and the Flood from the Babylonians during their exile in the sixth and fifth centuries B C, and that consequently they were neither written by Moses, nor inspired of God

They reached this conclusion, however, much too hastily, for when the Assyrian, Babylonian, and Sumerian stories were examined in greater detail it was seen that they differed fundamentally from the Bible account

Professor Hommel of Berlin asserted quite definitely that the differences were so extensive that the Bible account could not have been derived from the Babylonian Dr Pinches of the British Museum agreed with this judgment and went further to declare that they are two substantially distinct accounts. Dr A H Sayce completed the discomfiture of the critics when he wrote:

"An impassable gulf separates the biblical cosmogony from the Babylonian, for while the latter is grossly polytheistic, the former knows only one omnipotent God"

Naturally the critics sought to set up a new defensive line after their retreat from the original position, and this took the form of asserting

that the Genesis account was a purified, yet still humanly conceived version of the Babylonian story

This position, however, has proved equally untenable, for with all their juggling with the text of Genesis they have had to admit that the Creation and Flood stories were written long before the Babylonian exile

The only rational explanation, therefore, of the two literary forms is that they both stem back to the original revelation concerning Creation the Bible account having been divinely preserved from corruption and error and finally put into writing by Moses under the guidance of God, while the other account has become progressively more corrupt as it has been passed on from one idolatrous nation to another

No more convincing evidence of the inspiration of Genesis could in fact be found than a comparison of the ancient Babylonian and Sumerian Creation and Flood stories with the sublime Bible account

AMAZING DISCOVERIES IN UR OF THE CHALDEES

Travelling south from Nippur we come to Ur of the Chaldees the home of Abraham The critics once denied the existence of both Abraham and Ur, but this impertinence was quickly disposed of when Mr J E Taylor the British Consul at Basra in 1853 dug into Tell el Maqayya or the "Mound of Pitch" and found an inscribed clay cylinder which proved it to be the ziggurat or temple tower of Ur!

Despite this remarkable identification, the site of Ur of the Chaldees was not thoroughly explored until Professor (now Sir) Leonard Woolley superintended a joint expedition of Pennsylvania University and the British Museum from 1922 1933

While Bible students had to wait a long time for the evidence from Ur, they were richly rewarded when it did come The critics who had belatedly admitted the possibility of Abraham being an historical character still declared that he could only have been an unlettered half savage of a very primitive age! But what did Woolley find?

Far below the Ur of Abraham's day he uncovered the wonderful civilization of the First Dynasty of Ur with its tombs of the kings and nobles, testifying to an almost un

(Continued on p 34)

YOU AND THE BOOK

A Shadow of Heaven on Earth

ALMA L TIBBS

1 Exodus 25 1, 2, 8—God wished to live among His people

"And the Lord spake unto Moses, saying Speak unto the children of Israel And let them make Me a sanctuary that I may dwell among them"

2 Exodus 25 10—He gave Moses a pattern of the desired dwelling place

"And look that thou make them after their pattern, which was showed thee in the mount"

3 Hebrews 8 5—The pattern came from heaven

"Who serve unto the example and shadow of heavenly things as Moses was admonished of God when he was about to make the tabernacles for, See saith He, that thou make all things according to the pattern showed to thee"

4 Numbers 3 38—It was always pitched facing the east

"But those that encamp before the tabernacle toward the east shall be Moses, and Aaron and his sons"

5 Exodus 26 33—A veil divided the tabernacle into two apartments

"And thou shalt hang up the vail, and the vail shall divide unto you between the holy place and the most holy"

6 Hebrews 6 19 20—There is a veil in the heavenly sanctuary

"Which entereth into that within the veil whither the forerunner is for us entered even Jesus, made an high priest forever"

7 Hebrews 9 24—There are also holy places there

"For Christ is not entered into the holy places made with hands, which are the figures of the true, but into heaven itself, now to appear in the presence of God for us"

8 Exodus 40 20 21—The ark containing the tables of testimony (the Ten Commandments) was placed in the most holy place

"And he took and put the testimony into the ark, and he brought the ark into the tabernacle, and set up the vail of the covering"

9 Revelation 11 19—John saw the "ark of His testament" in heaven

"And the temple of God was opened in heaven, and there was seen in His temple the ark of His testament"

10 Exodus 40 22, 23—The table upon which was kept "the bread of the presence" stood on the north side

"And he put the table in the tent of the congregation, upon the side of the tabernacle northward, without the vail And he set the bread in order upon it before the Lord, as the Lord had commanded Moses"

11 John 6 48—The bread on the table represented Jesus Himself

"I am that bread of life"

12 Exodus 40 24—The candlestick (with its seven lamps) was on the south side

"And he put the candlestick in the tent of the congregation, over against the table, on the side of the tabernacle southward"

13 Revelation 1 12, 13—Jesus was seen in the midst of the candlesticks in heaven

"And being turned, I saw seven golden candlesticks, and in the midst of the seven candlesticks one like unto the Son of man, clothed with a garment down to the foot"

14 Exodus 40 26—A golden altar stood on the west side

"And he put the golden altar in the tent of the congregation before the vail"

15 Hebrews 9 6, 7—Men called priests and high priest ministered in the earthly tabernacle

"Now when these things were thus ordained, the priests went always into the first tabernacle But into the second went the high priest alone"

16 Hebrews 5 5, 6—Jesus was appointed priest in the heavenly sanctuary

"So Christ glorified not Himself to be made an high priest, but He that said unto Him, Thou art My Son, today have I begotten Thee As He saith also in another place Thou art a priest forever after the order of Melchisedec"

17 Hebrews 5 1—The high priest was taken from among men

(Continued on p 34)

JESUS WILL RETURN

M L ANDREASEN

WHILE critics of the Bible make light of the doctrine of the second coming of Christ, there is a general awareness among the people that we are standing before great and momentous events, and that conditions in the world are much like those which the Bible says shall prevail in the world shortly before the appearing of the Lord in the clouds of heaven While critics repudiate the teaching of the Bible in regard to the imminence of the Lord's appearing, there is a growing trend toward the belief that the great event is at hand

The world is now repeating the experiences of the first advent The faithful in Israel were then longing for deliverance, "waiting for the consolation of Israel" Luke 2 25 But this did not include the religious leaders They were, many of them, in complete ignorance of the fact that the greatest event of the ages was about to take place The night Christ was born they were asleep, physically and spiritually The shepherds were awake While they were "keeping watch over their flock by night," an angel announced to them the tidings of great joy, "Unto you is born this day in the city of David a Saviour, which is Christ the Lord" Verses 8, 11 The shepherds promptly went to seek the Saviour, and found Joseph and Mary, not in the home of the rich, not in the palace of the high priest, but in a stable There, in a manger, Jesus Christ was born

The reason the chief priests and the scribes were not on hand to greet the Saviour was not because they were ignorant of the prophecies They knew them well, and this constituted their condemnation When asked by Herod where Christ should be born, they answered "Bethlehem," "for thus it is written" Matthew 2 5 (See Micah 5 2) Neither were they ignorant of Balaam's prophecy concerning the star that should appear (Numbers 24 17) No, the spiritual leaders of the people were not ignorant of the Bible and its prophecies, but they had deliberately closed their eyes to its plain predictions Thus they were unprepared to greet the Saviour when He was born, and later they were led to reject Him The parallel between them and some of the religious leaders of today is obvious Many of them are today rejecting the prophecies of the second coming as the men of old rejected the prophecies of the first coming

To me the doctrine of the second coming appears reasonable and sane—the exact opposite of those who believe it fanatical and fantastic Christ came to this world once All Christians believe this There is therefore nothing inherently improbable in the belief that He may once more come Further, if there are good reasons why He should come a second time the possibility that He may come turns into a certainty This we intend to show

The world today is in a bad way If I were a physician and had a patient as ill as this world is now I would despair of being able to do much to help him

A patient with a weak heart is not necessarily doomed to an early death With good care and intelligent carefulness, he has a good chance of living to a ripe old age If however he is afflicted with cancer also and tuberculosis, and perhaps pneumonia, if he should suddenly break out with rash all over, become afflicted with typhus and typhoid there would be little reason for hope that he would recover If in addition to all this he should have a stroke or two, it would be safe to conclude that the end is not far off

This is the condition of the world today Unrest is breaking out all over, cancer is permeating the whole social fabric, vice and dissipation are breaking down the constitution, false political and religious doctrines are poisoning the well springs of life, the air is contaminated with intolerance and hatred, the whole world seems on the verge of collapse The first stroke came in the first world war, the second, and worse, in the second global war To the astonishment of many, the patient rallied, and doctors are now frantically looking for a remedy that will prevent another stroke Few men believe that civilization will survive one more stroke It is three times out

The wonder is that the Lord can look upon this and keep silence This was the complaint the prophet Habakkuk made He could not understand how the Lord could hold His "tongue when the wicked devoureth the man that is more righteous than he" Hab 1 13 In despair he reminded the Lord that he had called His attention to this before, but that the Lord had done nothing "O Lord," He says, "how long shall I cry, and Thou wilt not hear! even cry out unto Thee of violence and Thou wilt not save!" Verse 2

At times I have been tempted to join Habakkuk in his complaint that the Lord is not doing anything in regard to conditions in the world, which most certainly are worse than they were in the days of the prophet I have been restrained from doing so because of the answer God made to Habakkuk's complaint Says God "I will work a work in your days, which ye will not believe, though it be told you" Verse 1 The Lord *was* working He had His plans laid to step in at the right time It might not seem to Habakkuk that God was doing anything or that He was even aware that things were not what they should be But God knew what He was doing though men would hardly believe it though they were told

So, though I cannot understand why God waits while so many things happen and evil men are planning to do still more evil, I have faith in God that He knows, and can even believe that at this very time God has His plans all ready for any eventuality A study of Habakkuk's book and message has helped me to believe that God is doing more than appears on the surface God *is* working, and it is for me to wait patiently for God's complete plan to be revealed The vision "is yet for an appointed time, but at the end it shall speak, and not lie though it tarry, *wait* for it, because it will surely come it will not tarry" Habakkuk 2 3

Why should the Lord come a second time? There are three main reasons to make an end to the war of extermination which will rage at that time, to save His people, the remnant, who are in the midst of the turmoil, to greet the risen saints, who at that time are raised from the dead in the first resurrection, and take them and the remnant to heaven

In the latter times of earth's history many and fearful things will happen "This know also, that in the last days perilous times shall come" 2 Timothy 3 1 The world will not expire peacefully, but in a series of convulsions Says Christ "Nation shall rise against nation, and kingdom

against kingdom: and there shall be famines, and pestilences, and earthquakes, in divers places All these are the beginning of sorrows" Matthew 24:7, 8 Paul speaks significantly of these disasters that shall sweep the earth, as 'travail upon a woman with child." 1 Thessalonians 5 3 This expression indicates that at first a rather light wave of distress will come, but that it will increase in strength until the climax suddenly bursts on the world

Just preceding the actual coming of the Lord, the seven last plagues will fall upon men as a punishment for their evil deeds

During the time of the plagues and the travail of the earth, the remnant people have been living amid scenes of destruction such as men have never before witnessed but of which we have had a small sample in the destructive power of the atomic bomb. God protects and shields His people during the time of the plagues, but in the final destruction it is clear that only a special miracle of God will ever save them when the whole creation collapses, and 'the earth shall reel to and fro like a drunkard" Isaiah 24 20 However, God will care for His own, and at the proper time deliverance will come

At His first coming to earth as a little child, men reviled Christ, spat upon Him, and at last crucified Him When He comes the second time He comes as King of kings and Lord of

(Continued on p 29)

A SHADOW OF HEAVEN ON EARTH

(Continued from p 32)

"For every high priest taken from among men is ordained for men in things pertaining to God"

18 Hebrews 2 16, 17—Jesus was taken from among men to become High Priest

"For verily He took not on Him the nature of angels, but He took on Him the seed of Abraham Wherefore in all things it behoved Him to be made like unto His brethren, that He might be a merciful and faithful high priest in things pertaining to God, to make reconciliation for the sins of the people"

19 Hebrews 5.1—The work of the priest was to offer sacrifices for sin

"For every high priest is ordained, . . that he may offer both gifts and sacrifices for sins"

20. Hebrews 9:26—Jesus sacrificed Himself.

"For then must He often have suffered since the foundation of the world, but now once in the end of the world hath He appeared to put away sin by the sacrifice of Himself"

21 Hebrews 7 25—Therefore by His intercession He can save "to the uttermost"

"Wherefore He is able also to save them to the uttermost that come unto God by Him, seeing He ever liveth to make intercession for them"

UNEARTHING HISTORY

(Continued from p 32)

believably high level of culture

Coming down (or rather up into the higher levels of the mound of Ur) to the days of the Larsa kings, who overthrew the splendid Third Dynasty of Ur Woolley laid bare the Ur of Abraham's time Here he found the remains of a great religious centre, a commercial city with substantial houses far more elaborate than those of Nebuchadnezzar's day at Babylon, and equally as good as that of a well to do citizen of modern Bagdad!

In the temple treasuries he found business like records of tithes and offerings, in the temple schools he unearthed tablets indicating a wide curriculum, including reading writing mathematics and astronomy as well as historical documents and religious texts

No wonder Professor Woolley wrote We must revise considerably our ideas of the Hebrew patriarch when we learn that his earlier years were spent in such sophisticated surroundings, he was the citizen of a great city and inherited the traditions of an ancient and highly organized civilization"—*Ur of the Chaldees*, p 168

Thus have the excavations at Ur of the Chaldees provided a new and vivid background of the great yet idolatrous city in which Abraham grew up, and from whence he went out, at the call of God, to become the progenitor of the chosen people of God

Bible Account of Migrations Corroborated

Before we leave the earliest records of Genesis, we may pause to note one other wonderful ray of archæological light which has been shed upon the much-controverted tenth chapter of Genesis

The Bible account of the spreading out of mankind after the Flood from the region of the Caucasus was disputed until the present century by both the Egyptologists and the Assyriologists

As recently as 1907 G Massey asserted in his book, *Ancient Egypt—the Light of the World*, that Egypt was the cradle of civilization, while Professor M Jastrow, in one of his articles in *Hastings' Bible Dictionary*, asserted that the entire civilization of Syria and Mesopotamia was Semitic from the earliest times

Both these criticisms of the Bible record have now been swept away by the work of Sir Leonard Woolley, Sir Flinders Petrie, and others

The Sumerian civilization which Woolley found underlying the beginnings of the first Babylonian empire was proved from the facial types of the statuary, etc, to be definitely non Semitic and akin to the Ethiopians of Africa Dr Hall of the British Museum likewise found a dark skinned race in the earliest Elamite levels of Persia

Parallel with these discoveries, Egyptological research has revealed that the earliest civilization of Egypt came across the Red Sea from Southern Arabia, which in turn was civilized by Sumerians from Southern Babylonia

Elise J Baumgartel in her *Cultures of Prehistoric Egypt* follows up the suggestions of Sir Flinders Petrie by dividing the predynastic period in Egypt into two parts, the earlier, Nakada I, which she derives from Persia via the straits of Aden and the upper waters of the Nile, and Nakada II, which came from a home not far removed from the Sumerians of Southern Babylonia via the Wadi Hammamat

In his book, *The Deluged Civilization of the Caucasus Isthmus*, Professor Fessenden, of the University of Pittsburg, likewise shows conclusively from Greek mythology that their civilization came originally from the Caucasus region

The latest ethnological research thus corroborates the Bible assertion that the human race spread out from the Caucasus, the Hamitic peoples first settling in Mesopotamia (Gen 10 6-20) and later moving south and east into Africa to make way for the oncoming Semitic peoples; while at the same time the Japhetic race was moving north and west into Europe and east into India and beyond.

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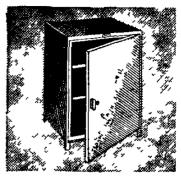
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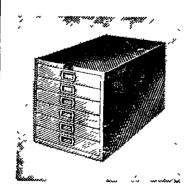
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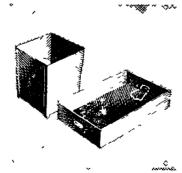
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SKY SURVEY REVEALING NEW INFORMATION ON UNIVERSE

The 200 inch telescope at Palomar Observator California the largest in the world, is now bein used in making a new photographic map of th universe, revealing details never known before The telescope is making a photographic record of star that are at least 2 000 billion billion miles from the earth

ELECTRON GUN LATEST WEAPON IN FIGHT AGAINST CANCER

The [illegible] being [illegible] by a Stanford Univer [illegible] United State will be used [illegible] with electron [illegible] being built by Stanford Univer [illegible] will be manufactured [illegible] Ray Department of the General Electric [illegible]

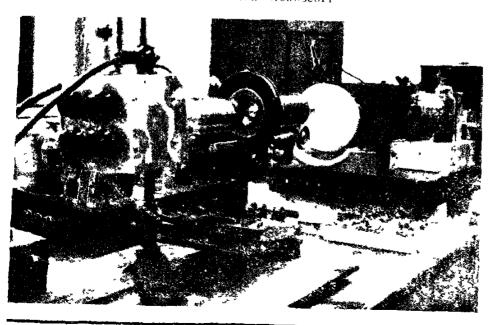
FIRST TELEVISION MICROSCOPE

Frank Roberts, brilliant 36 year old scientist, has invented the world's first television microscope This device, half microscope half television set can magnify living tissues up to 15 000 times When fitted with an extra gadget, the TV microscope will also be able to [illegible] minute objects like blood cells measure them and record exactly how many of each kind are on the slide This ha never been possible before Th first big job scheduled for th new invention is to count an sort out the total number of cells in the human brain Doctors using it will be able t watch the exact behaviour of living disease germs when be ing attacked by chemicals—a advance which should speed th discovery of new drugs Photo shows View showing the Pho electric cell (magic eye) o left, slide carrier microscop and the scanner

Photo by Cobind Ltd

Home Nursing

INFRA-RED OR DRY-HEAT TREATMENT

STELLA PETERSON, R N , B Sc

LIGHT is made up of long and short rays of which only a part are visible to the human eye The shorter rays beyond those visible to the human eye are known as ultra-violet rays; those longer rays, not visible, are called infra-red rays The shorter violet rays have definite germ-killing value, whereas the longer red rays give off heat Lamps have been made to generate the ultra-violet rays and infra-red rays

The infra-red rays are also divided as to their length; some are relatively shorter than others Luminous heat bulbs give off the shorter infra-red rays and the non-luminous heating elements, cones or coils, give off the longer red rays The ordinary bathroom electric heater is a non-luminous source of heat and can be used for application of dry heat quite effectively There are on the market 250-watt infra-red bulbs which supply the shorter luminous rays These bulbs can be used in an ordinary light socket A reflector adds to the effectiveness of the lamp by directing the rays to the area desired

It has been found that the shorter infra-red rays of luminous sources are more penetrating, thus reaching the network of blood vessels under the skin where the heat can be carried away by the blood to other parts of the body The longer non-luminous rays do not penetrate so deeply and thus may cause blistering of the skin

The skin sensation should be that of warmth and comfort Infra-red should not be used if the skin sensation of heat or pain is impaired, because of the danger of burns If the circulation of the area is poor there is also danger of burns Therefore infra-red should be carefully applied

Infra-red increases the circulation through the part treated, bringing nutritive material and carrying away waste material and inflammation The mild penetrating heat of infra-red relaxes the tissues and acts as a sedative to relieve pain

Equipment Needed

1 Infra-red lamp Luminous tungsten-filament bulb (therapeutic Mazda CX 250 watts)

2 Non-luminous lamp or bathroom heater

Artificial light treatment being administered to two patients in a hospital

Procedure

1 Distance—usually eighteen to thirty inches (Individual tolerance for a comfortable sensation of heat The skin should have just a faint pink blush)

2 Time—average duration from thirty to forty-five minutes—depending upon amount of area exposed and effects desired

3 Frequency—depends upon the condition to be treated—once or twice daily

4 Place the patient in a comfortable position with the part to be treated as relaxed as possible

5 Expose area to be treated, and protect rest of body with suitable covering

6 Take special care of sensitive areas Cover or close eyes when giving application to face

7 Check treatment at every five minutes

8 Follow with alcohol or light massage

Precautions

1 Avoid burns where there is a loss of skin sensation of heat or pain

2 Use with extreme caution if circulation is poor, as in hardening of the arteries in the feet or legs

3 Be sure equipment is in good order

Indications

1 Painful muscles and joints of rheumatism

2 Muscle strains

3 Neuritis and neuralgia

4 Bronchitis

5 Sinusitis, if there is free drainage

Contents

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L. J. LARSON, M.A., B.Sc., Editor

DUNBAR SMITH, M.D., D.N.B., D.T.M. & H. (LOND.) Associate Editor

J. B. OLIVER, M.D., D.T.M. Associate Editor

OUR COVER

A young enthusiast practising on the hors.

Photo by Pranlal K Patel

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Minute Meditations

THE LITTLE FOXES

D. A. Delafield

"CATCH us the foxes, the little foxes, that spoil the vineyards, for our vineyards are in blossom."—The Bible.

Father was sitting in the big over-stuffed chair unobserved, he thought, when Janice noticed his obsession with the comic strip. "Why should Daddy do that?" she thought. Hadn't he warned her against "the awful comics"? Hadn't he explained, "Bad comics make bad children. You shouldn't read them, Janice. I want you to grow up to be a good girl"?

What was the trouble with this father? Could he rightly except his daughter to take him seriously? Wasn't his own pre-occupation with the comic magazine a hold-over from his own childhood? If he hadn't become mature yet, how could he expect Janice to grow up?

The lesson is that parents must set the example if they expect their children to become good big people. Instruction in the good way of life must be interpreted by a consistent example or it has no meaning for little folks. Example counts, yes, even in little things.

Perhaps you have heard the story of the artist working on a figure of Christ in a stained-glass church window. Tired after hours of labour, he took a walk. While he was gone a house-keeper came into the studio and tidied up things for him.

When the artist came back to his work, he noticed that a tiny piece of blue glass was missing. He questioned the women who had cleaned the studio for him. She said, "A tiny piece of blue glass? It was very small, wasn't it? Yes, I remember it. I swept it away. But," she went on, "What

(Continued on p. 5)

THE EDITOR SAYS

The Two Great Commands of Nutrition

U. D. REGISTER

RAPID advances in our knowledge of nutrition in the last ten years have startled not only the average citizen but also *trained nutritionists*. The ever-increasing number of vitamins being discovered, together with the long list of amino acids and minerals required for optimum nutrition, is almost overwhelming.

About 400 B.C. Hippocrates suggested that food supplied energy for work, and until the nineteenth century, nutrition really meant calories. Even at the beginning of the twentieth century only four basic nutrients were systematically considered—protein, fat, carbohydrate, and ash. The term *vitamin* was not coined until 1912, by Funk. Now we recognize more than fifty nutritional factors.

Many conscientious people develop a great fear of not obtaining every single nutrient. Obtaining the essential nutrients is important, but how did our forefathers, who never heard of vitamins, cope with this nutritional problem of obtaining an adequate diet? Dr. A. J. Carlson of Chicago University has made this very enlightening statement for simplifying the nutrition programme: We get "dietary health insurance in the eating of the greatest variety of natural foods, for in no other way did our ancestors survive and prosper."

With developments in the fields of sulfa drugs and antibiotics, most infectious diseases are under control. Dr Fredrick J. Stare of the Harvard School of Public Health stated that with common infectious diseases in hand, nutriton is the single most important environmental factor affecting our health. (Harvard Public Health Alumni Bulletin, Nov., 1951.)

Since our major diseases, such as hardening of the arteries, heart disease, diabetes, arthritis, obesity, premature aging, and mental disorders, are associated in part with faulty nutrition, more emphasis must be placed upon the scientific aspects of nutrition by clinicians and public health educators. For those not trained in nutrition, Dr. Charles Glen King of the Nutrition Foundation says, "One must view the quality of the diet as a whole and avoid the extremes and imbalances that are so often encountered by getting excited about only one or a few vitamins or minerals. It is utterly foolish to emphasize too greatly the role of only one or a few nutrients. . . . The only reasonable goal in nutrition is a lifetime concert of good food habits."

Nutritionists have suggested that the two most fundamental, practical, and yet simple rules for maintenance of a good nutritional state are: (1) Eat a wide variety of natural foods, and (2) maintain an ideal weight.

Experiments with animals dictate against the use of one food to the exclusion of others. Many excellent foods when fed alone will result in nutritional failure. Milk will lead to anemia owing to an iron deficiency, whole wheat a vitamin A deficiency, soybeans a vitamin B_1 deficiency. There is no one food we can call manna today, but one food supplementing others will provide an adequate diet. The most striking example is that of milk and whole wheat. Dr. H. C. Sherman fed a diet of 1/6 dried whole milk and 5/6 ground whole wheat, which supported normal growth, health, reproduction, and lactation through more than seventy generations of rats with no diminution of size or vigour. See *Chemistry of Food and Nutrition*, 1952, p. 598.

The basic-seven food group, popularized as the Wheel of Good Eating by the American Red Cross, still represents an excellent programme for ensuring an adequate diet for the whole family. Eating a wide variety of foods according to the basic-seven pattern or some similar pattern will not only provide all known essential nutrients but also all those not yet discovered. One advantage of depending on food instead of pills to nourish our bodies is that we get the vitamins yet to be discovered as well as those already known.

There are many ways of employing various types and combinations of foods by which one may obtain an adequate diet. Modification of the basic seven is offered as one suggestion for the daily programme:

THE BASIC FOODS

1. Leafy green or yellow vegetables—one or more servings. This group is rich in vitamin A, iron, and other important nutrients, as well as supplying roughage.

2. Oranges, tomatoes, grapefruit, strawberries, cantaloupe, raw cabbage, or salad greens. One or more servings provide vitamin C [illegible]

3. [illegible]
children, [illegible] average glasses; [illegible] This group supplies calcium for bones and teeth, high-quality protein, riboflavin, and other nutrients.

4 Protein foods, peas, beans, and cheese—one to two servings. Eggs—three to five a week. Protein foods are generally good sources of B complex vitamins.

5 Bread, flour, and cereals (whole-grain products are nutritionally preferable)—two or more servings. When white flour is used, make sure it is enriched. Cereal foods give you a low-cost source of energy and provide protein, iron, and B vitamins.

6 Butter (or fortified oleomargarine). This food is an important source of vitamin A. It adds flavour and palatability to other foods.

7 Potatoes and other vegetables and fruits—two or more servings. Potatoes are a good source of vitamin C. This group makes a general contribution besides adding interest, enjoyment, and variety to the diet.

When this type of programme is followed, complicated or concentrated "pep pills" are certainly not indicated. Money is much better spent on good wholesome food. Vitamin pills may be necessary in certain disease conditions, but for the average person they are no substitute for poor eating habits

Following a simple programme of eating a wide variety of each of the food groups as outlined will ensure adequate quantity and quality of protein and adequate minerals and vitamins. There are those who say the soil is "dead" (soil improvement is needed), and therefore the food is "dead"; but in this modern age, when we obtain our food supply from many parts of the country, a deficiency of any one nutrient will not develop if the foregoing simple plan is followed carefully.—*Review and Herald.*

WHAT'S IN THE NEWS?

Honolulu, Hawaii, has seven radio stations and two television stations.

• • • •

Only female mosquitoes bite people. The males have poorly developed mouth parts. They drink water and feed on flower nectar.

• • • •

A smew is the smallest of the mergansers This may sound like double talk, but the National Geographic Society says that the smew is a small fish-eating duck of northern Europe and Asia that is particularly expert at diving for its food.

• • • •

Some people get paid to pick daisies For workers in Africa, Japan, and Ecuador it is purely a business proposition, for the white-petalled, yellow-centred flowers yield an extremely potent insecticide. Last year, reports the National Geographic Society, the United States imported 8 million pounds of the dried blooms.

• • • •

Until a child is ten years of age he is more time consuming than an adult in the family. A baby under one year of age requires as much time of the homemaker as two adults.

• • • •

A small, little-known island in the Indian Ocean is one of the world's most densely populated spots, reports the National Geographic Society. Situated about 572 miles due east of Madagascar, Mauritius is the home of slightly more than half a million people.

• • • •

Nine Sherpas—tribesmen who are a valuable aid in expeditions in the Himalaya Mountains—came to Switzerland to take a three-week course in mountain climbing Among them was Tenzing, the Sherpa guide who climbed Mount Everest last year with a British expedition. He and the others hope to qualify for status as Swiss mountain guides

The Little Foxes

(Continued from p 3)

could you do with a piece of glass as small as that?"

She went to search for the piece of glass. When she recovered it, the artist, holding the little piece in his hand, climbed the ladder and put it into place in the window. Looking at the woman he said, "Now what is the most important part of the design?" As she looked she noticed that the little piece of blue glass was the clear blue eye of the Saviour.

Parenthood may not seem important, but if you put it in the proper place in your life, the love of right and truth will shine through to your children.

Little foxes may destroy the tender blossoms that flourish on the branches of the vine. Perhaps the children of tender years who are picked up by police patrols, detectives, and vice squads could be spared if home influences were right. Comic books and pornographic literature are bad. Too much radio, too much sports, are also bad.

Indifferent parents who do not take the time to reason from cause to effect on these matters will have to rise up in alarm and make a change in their habits if they want to save their children. They must substitute fences for foxes if they would save the tender blossoms.

Supply something better for every indulgence denied, and what a thrill it will be to watch the tender blossoms grow into beautiful fruit!

Developing a Balanced Mind

CLIFFORD R. ANDERSON, M.D.

OF ALL the many interesting things in nature that are open to our study, there is one object that always holds our supreme interest, and that is ourselves. We begin as one tiny, invisible cell, too small to be seen by the naked eye, and from this infinitely small beginning we continue to grow until we reach adult maturity Compared with that first tiny cell, our ultimate size is simply enormous But size is not the most important thing, by any means, for there are many larger animals than man. That which sets human beings apart from all the rest of creation is that wonderful human brain, which has been so aptly called "the organ of the mind"

Animals have brains But even the most intelligent animal can scarcely be said to possess a real mind, capable of abstract thought and deductive reasoning Only human beings have this power. And in this respect they stand alone and above the rest of creation.

Train Your Children Wisely

The development of a balanced, intelligent mind is the most important responsibility ever committed to man. A child cannot do this by himself. He must be taught Parents and teachers share this responsibility for the younger generation By their actions and attitudes they may either encourage initiative, or crush this wonderful gift of intelligence in the children under their care. The training of a child is always a most important responsibility. It must never be taken lightly. We are held accountable to God for the way in which we train our children

The growth of a human being is not simple enlargement of that one single original cell. Rather it consists of an enormous multiplication of that cell until the very numbers stagger the imagination Yet each one of those is a separate unit of life in itself It is born independently, and takes on its own particular shape, according to the function that it must perform Each single cell feeds and breathes for itself, and specializes in some particular function But although each cell lives its own individual life, it still forms a part of that great cellular structure, the human body

Why Chilren Differ in Personality

From the very moment of conception, we can see the development of a distinct organization, a great family of cells, which togethe form one person. Even from th first day that individual is alread forming a personality of his own That is why children born into th same family are often so differen from each other. These difference should be encouraged, for ofte there may be a spark of genius i the child that only a parent o teacher can bring out.

Dr Clifford R Anderson broadcasts his weekly health talks over Radio Ceylon.

Tune in at 7:00 p.m. every Saturday on the 31 metre band and listen to "Your Radio Doctor" programme.

How Your Brain Develops

It is fascinating to study huma development, even in the earlies stages of embryonic growth. A fe days after the moment of concep tion several important structure are already taking shape, and soo their life-long functions will begin As the cells increase in numbe they form delicate membrane folding over and shaping them selves into organs, such as the hear kidneys, blood vessels, and even th primitive gastro-intestinal tract

Near the end of the third wee a tiny groove can be seen takin shape across the rapidly developin embryo. This is the beginning o the central nervous system Here i the centre of intelligence for th individual, the beginning of an other human brain. The primitiv membranes fold and multiply an extend until at birth the brain of a baby is already a complete functioning organ. But looking a the first tiny groove, one coul hardly imagine the manifold re ponsibilities that may one day b carried on within that brain.

The wonders of nature are b no means limited to what can b seen by the naked eye. Life goes o

in infinitely small forms. A single drop of water may contain thousands of individual creatures, all living their own individual lives. They swim, and dart about, and feed at will. Perhaps it is well that we do not see them all! But what a revolution the microscope has brought about in human thinking! Without that marvellous instrument our knowledge of the human body would be almost as limited as that of the ancients. Just as the telescope opened up vistas of immense distances, so the microscope has revealed the secrets of life in tiny forms of which the ancients never even dreamed.

But most important of all, the microscope revealed the intricate construction of the human body. It has explained many mysteries that had long baffled intelligent men of science. Fragments of tissue can now be dissected and still correctly identified, because of the characteristic cells of which they are constructed. Today we know that it is the living cell that holds the secret of human life, and of all the other forms of life as well.

The most remarkable cells in the human body are the nerve cells. Some of these cells are rather short. It is their job to connect the various nerve trunks together, so that when necessary the nerve impulses may be spread out over a wide area. But many other nerves are very long. In fact, they are by far the longest cells in the human body. They stretch from the spinal cord out to the tips of the fingers and toes. Thus in some cases they may be as long as thirty-six inches. The body of the nerve cell may be located within the spinal cord, but the long, thread-like cable that stretches out to some distant extremity is still a part of that same nerve cell. If that axon is cut, the severed end immediately dies. But here again we see the miracles of nature. That injured nerve cell again thrusts forth a new fibre to replace the old.

Here is a model of the human brain—the most wonderful structure in the human body wherein are located the functions of memory and judgment.

Surgeons Repair Damaged Nerves

If a nerve trunk is cut, it is always important for the surgeon to sew the cut ends of the nerve together. This will help to retain normal relationships within the body. If the cut ends have been damaged so that they cannot be brought together, a nerve graft can be used. These nerve grafts can be taken from some other part of the patient's body, or a piece of nerve that has been specially preserved by freezing can be used. Thus even dead nerve tissue may be used as a regenerating pathway along which the nerve axons may grow. This is occasionally done to provide nerve impulses to muscles that have been permanently paralyzed by poliomyelitis.

The larger nerve trunks stretch like small electric cables from one section of the body to another. They are not single strands, but are composed of thousands of nerve axons all bound together in bundles, somewhat like underwater cables and telephone trunk lines. And here is another very interesting feature. Each tiny axon, or nerve strand, is covered with its own sheath of insulating cells. Thus each single strand is able to convey its own message to the brain, or to whatever part of the body it is intended to serve. This was all carefully thought out by the Creator thousands of years before Alexander Graham Bell dreamed up the telephone.

All of our impressions of motion, and time, and space, of touch, and pressure, and temperature, are carried to the brain by these tiny nerve fibres. They are infinitely complex in the way they are put together. But the greatest mystery of all is the fact that every one of us has approximately the same brain tissue. All the structures are in relatively the same position, whatever our colour or race or age. How do they know where to grow and what form to take? We do not know. We can only say that behind the whole amazing process of growth and development there is a wonderful over-all plan. Perfection is seen at every step from babyhood to full maturity.

Your Brain Must Decide

In the brain all the various impressions are weighed and evaluated in the light of past experience.

(Continued on p. 24.)

INTUSSUSCEPTION—

A CHILDHOOD EMERGENCY.

JOHN M. GIBSON

Intestinal obstruction—intussusception—causes death in a child quickly when it is not cared for by a doctor at once.

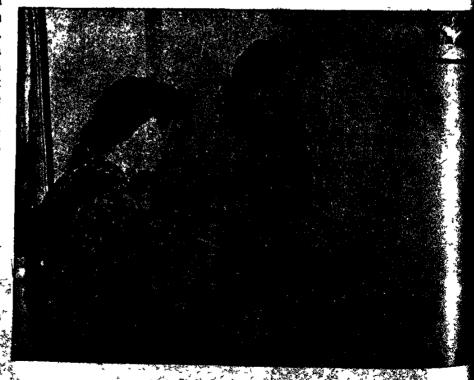
IF YOUR child should suddenly be seized with severe pains in the abdomen, become constipated, and start vomiting, you probably would conclude that he had acute appendicitis. And you might be right. But also you might be wrong. He might be suffering from something entirely different —intussusception. Intussusception is a form of intestinal obstruction. It occurs when one portion of the intestines slips into another portion.

The late famous Dr. William Osler used to tell his medical students to imagine a glove in which one of the fingers has been pushed back into the glove proper. That, he said, would give them a good idea of what happens when a child develops intussusception. At first only a small section of the intestine is involved, usually just a fraction of an inch. But in time the involved portion may amount to several feet. This telescoping process produces a sausage-shaped tumour. Except in rare cases, an upper portion always enters a lower portion.

If your child does have intussusception, you and your doctor have only about twenty-four hours to find it out and begin treatment. Otherwise, death, though not certain, is a dangerous possibility.

Appropriately called an affliction of childhood by Dr. Osler and others, intussusception is the most prevalent form of intestinal obstruction found among babies and young children. More than a third of all its victims are less than a year old. About fifty-six per cent are less than ten years old. It is considered more prevalent among boys than girls. Some child specialists say about three fourths of their intussusception patients are boys. They do not know why more boys than girls suffer from it.

Among the conditions mentioned by child specialists as tending to intussusception are the presence of abnormally large amounts of gas in the intestines (making one portion usually large); improper functioning of certain nerves and muscles; intestinal infections, such as typhoid, dysentery, and inflammation of the intestines, called enteritis; excessive use of laxatives, foreign bodies in the intestines, intestinal growths; cancer and injury to the intestines.

The transition from breast or bottle feeding to a more solid diet has also been listed as a likely contributing factor. But the simple truth in that *no one is too certain*

If your child is suddenly seized with pains in the abdomen, starts vomiting and is constipated, see your doctor immediately.

as to [illegible] A large percentage of cases (including many receiving post-mortem study) cannot be attributed to any specific cause.

The child with intussusception first feels a sudden, griping pain, usually in the region of the navel. Often it strikes while he is at play or engages in some other form of care-free activity. Excruciatingly sharp at first, it eases after a while. Then it comes and goes, usually at regular intervals of five to twenty-minutes. During those painless interludes the child may return to his playing, go to sleep, or lie quietly in his crib. Strangely enough, at first the abdomen is not tender. On the contrary, the child may get considerable relief from the pain by your pressing your hand on his abdomen. Later the abdomen becomes so tender that even the weight of bed-clothes or wearing apparel brings cries of agony

Vomiting often occurs at the outset, but not always But it usually comes eventually The child may or may not be constipated at first, depending upon how complete the obstruction is, but is certain to be in time

One of the most significant symptoms of intussusception is the passing of blood, which comes from the obstructed and congested portion of the intestines. Medical authorities at the Children's Hospital in Boston say that blood is found in the stools of eighty-five per cent of its patients within the first twenty-four hours. The amount varies. It is never wise to wait until you see blood.

Painful belching and hiccoughing may add greatly to the victim's distress. Gas forms in the intestines, markedly distending the abdomen. A cold, clammy perspiration drenches the skin. The vomiting, which at first is similar to that of a stomach upset, produces quite a bit of bile a little later. Still later there is another change. The material brought up takes on the

general appearance and the characteristic odour of human fæces.

The child's features become pinched and pallid. He goes into shock: his skin is cold, the pulse quickens markedly and is feeble, the temperature is usually subnormal, the breathing is shallow and rapid Urination all but ceases. The voice is husky. The continuous vomiting and sweating bring on dehydration The victim cannot retain the fluids taken by mouth. The abdominal pain becomes severe. Young babies draw their tiny legs up under their bodies in a peculiar position that child physicians associate with intussusception It also causes them to hold their breath and make grunting sounds associated with the disease The tongue is dry, brown, and parched The eyes are sunken

The wise admonition to call a doctor immediately in suspected appendicitis is equally life-saving in suspected intussusception. So is the warning against giving laxatives for appendicitis. Laxatives are to be as carefully avoided in one disease as in the other An enema is permissible if the physician or surgeon advises it. Keep the patient covered to prevent loss of body heat. Do not give him food by

mouth. But you may allow him to suck a piece of ice; it helps quench his thirst and tends to lessen vomiting.

Diagnosis of intussusception is not particularly difficult for the experienced physician. Dr. William E Ladd, an authority on this disease, said it "produces such a characteristic picture that it is possible to make the diagnosis over the telephone when the mother relates the story" But most doctors require more information than that In a large percentage of cases the tumour can be felt with the fingers The testimony of symptoms, physical examination, and case histories is conclusive in about nine cases out of ten In the few cases of doubt, X-ray pictures confirm the diagnosis

Surgery is the mainstay of intussusception therapy. It offers the only hope of recovery in most cases Because of the emergency nature of the condition, surgery should be done as soon as possible after the doctor has made sure that it is necessary

Unfortunately, though, it is not possible to operate immediately in all cases without dangerous risk. If there has been excessive loss of blood through the rectum or serious loss of water through vomiting or otherwise, the doctor must prepare the patient physically for surgery Fortunately, this need not involve more than a slight delay. The resulting improvement in the patient's chances of withstanding the operation is considered a good exchange for the added hazard of delay.

Surgery may bring about recovery in either of two ways: If it is done soon enough or other conditions are favourable, the imprisoned portion of the intestine can be released by the surgeon, the intussusception is corrected, and the patient returns to normal.

However, when surgery is delayed or unfavourable

(Continued on p. 15.)

SHOULD WOMEN SMOKE ?

FRANK LEIGHTON WOOD, M.D.

IN A study of the effects of smoking on any part of the body or on a group of persons from the health viewpoint, we look at the subject with a medical and scientific eye We will consider the effects of nicotine on the whole human organism as well as the parts most directly affected.

Nicotine is one of the most virulent poisons to be found in nature. It can be used beneficially only as an insecticide True, it has soothing and satisfying effects on those addicted to its use. These effects are brought about in two ways: through satisfaction of the habitual craving of a drug addiction, and through a stupefaction brought about by its interference with the blood supply of the highly specialized and sensitive outer layers of the brain cortex These effects are well described in Leo Tolstoy's essay aptly entitled "Why Do Men Stupefy Themselves?"

The soothing effects of nicotine are mildly comparable to those of morphine. But morphine, unlike nicotine, has little, if any, harmful constitutional effect. Its harmfulness lies almost entirely in the intense feeling of well-being it produces This in turn brings about a drug addiction so intense as to damage seriously or destroy completely the personality of its victim

Addiction to alcohol is almost as harmful to personality and character as opium There is a close relationship among all drug addictions, and all of them are more harmful to the personality of women than of men. Smoking gets a firm grip on most people, and those who drink at all are potential liquor addicts.

People who begin to smoke occasionally as a social custom almost invariably become tobacco addicts The longer they smoke, the more firmly the tentacles of this addiction fasten themselves upon their victims.

Girls and young women who begin to smoke with the avowed intention of quitting the habit if and when they find it harmful, should take warning that once they begin to smoke *daily*, no matter how little, there is small prospect that they will ever quit the habit. They are likely to continue smoking no matter how firmly they become convinced that tobacco is damaging their health, their beauty, their glamour, their personality, their efficiency as workers, or their character. Saddest of all, smoking is the surest way to make contacts that lead to drinking!

Like its effect on the brain, the specific effect of nicotine responsible for most, if not all, of the harmfulness of tobacco is brought about through partial starvation and asphyxiation of the various parts of the body. This starvation is caused by a constriction of the blood vessels that supply the parts with oxygen and nutrition. This has been proved by experiments and in actual practice on patients by many medical groups working in the greatest research investigations. In experiments carried out on hundreds of persons it has been found that the smoking of the cigarette lowers the temperature in the tips of the fingers and toes an average of 5.3 degrees. Also it causes a marked contraction of blood vessels in the retina, which can be seen through the pupil of the eye. Who would knowingly injure his own eyesight?

Two medical research workers

studied 350 patients having Buerger's disease during a twenty-year period, all of them heavy smokers. In this disease there is a gradual constriction of the small blood vessels of the arms and legs, particularly of the feet and legs The scientists discovered that smoking is the principal if not the sole cause of this disease Research workers of the Mayo Foundation declared after a thorough study of coronary disease of the heart that the incidence of this heart disease is six times greater in heavy smokers than in non-smokers In coronary heart disease, death is caused by a gradual constriction of the small blood vessels that supply the heart muscle with oxygen and nutrition

We have reason to believe from these scientific studies and the principles involved that all parts of the human organism are affected by nicotine in this same manner Also we have the reported experiences of many specialists and other physicians in obstetrics, women's diseases, and general medicine that corroborate everything discovered and reported by the research workers

Now we shall apply these facts to the effects of smoking on women as wives and mothers The organs, glands, and other body parts so important to all the various phases of reproduction are provided by the Creator with a rich blood supply Because of the nature of their work, anything that interferes with that blood supply interferes with their functions

The aging effects of nicotine upon women are plain to the glance of any experienced observer Aging is plain to be seen, despite the usual mask of make-up worn by confirmed smokers. This obvious aging is partly the result of starvation of the skin brought about by nicotine. The use of so-called cosmetic skin foods may be a waste of money. Nothing can so effectively feed the skin as good rich blood circulating within and beneath it.

A similar starvation of the glands of internal secretion—the glands most important to everything that makes women attractive to men—is also partly responsible for the visible ill effects of smoking upon women

Let every school-girl, every young woman, who contemplates toying with cigarettes because others are doing it take warning before it is too late Disregard the flamboyant cigarette advertisements displaying for a price the faces and falsifications of notables of stage, screen, athletics, and society

It is the wish of almost every young girl to have a husband, a home, and children But if she begins to smoke as a girl, what effect will this habit have on those fond hopes?

By the time she is ready to marry she may be smoking up to three packages of cigarettes daily As a rule, women smoke even more heavily than men Young women as a rule weigh a great deal less than men, a girl weighing one hundred pounds is poisoned twice as much as a man weighing two hundred pounds who smokes the same number of cigarettes daily

It has been my experience in more than forty years of active obstetrical and general practice that most mothers who smoke have decidedly fewer babies than mothers who do not smoke More of the smokers have no babies at all I have seen that pregnancy in smokers is much more stormy with discomforts, dangers, and complications than in non-smokers These complications are nausea, vomiting, indigestion, bronchial troubles, spontaneous abortion, premature birth, and failure to gain weight normally.

Doctors who smoke—like most other smokers—often condition their thinking and logic to conform

(Continued on p 28)

On the Trail of Radiant Health—No. 13

HOW TO COMBAT NERVES, FEAR, AND WORRY

WAYNE McFARLAND, M.D

ALL of the health laws that we have discovered thus far have been vital to a healthy body But if one thing could be more important to our health than another, I am sure that what we shall now discuss is by far the most important of all We might, through ignorance or neglect, forget some of the rules of health, and for a time we might seem to be in health But so marked an effect on the body have the laws we shall now discuss, that the result of obedience or disobedience to them is seen immediately

We are going to learn some of the basic laws for good mental health, furthermore, we are going to show you what good thoughts or bad thoughts can do to your body There can never be any doubt in your mind after this that a man's body, mind, and soul are inseparable and that one affects the other

Do not continue in a state of nervousness, fear and worry They will cause you great discomfort and may even lead to internal disorders.

A Unique Means of Study

First of all we turn to a bit of scientific research to show you how the thoughts and emotions can affect the functioning of your stomach Some years ago a child swallowed some food so hot that it scalded his gullet and closed the tube to his stomach Physicians made a new opening, and the child lived in spite of the inconvenience of having to be fed, not through his mouth, but through the opening made in his abdomen

Physicians saw this as an opportunity to study stomach function by peering through this artificial opening And the child, now a grown man, serves as a laboratory worker, and has been the subject of some very interesting experiments

One day the man became angry about something during an experiment and immediately the doctors observed that the stomach became very active, pouring out large quantities of acid juices, even changing its colour to a deep red corresponding to the flushed and red face that the patient now had In fact, so engorged did the little blood vessels of the stomach become that some of them actually burst, and little pin-point hæmorrhages appeared

But that was not the only interesting effect of emotions on

digestion. It was noted that when the man was depressed, sad, or fearful, this mental state also was reflected in the stomach There was less blood flow, less gastric juice, and slower movement of the stomach

How to Develop Ulcers

Besides, let us point out that the sequence of these conditions, such as increased stomach acidity, the small hæmorrhages in the stomach lining, and stomach activity, is the group of events that can lead the small hæmorrhages to become eroded, and the high acid helps to eat out a small crater This is one of the ways to develop ulcers of the stomach

When Tom, for that was the man's name, was happy and he was enjoying his work, the stomach assumed its normal colour, the blood flowing through it was normal, and the amount of gastric juice that was secreted was just right

This is indeed a remarkable experiment and a scientific observation that supports the belief that the stomach is closely related to the mind and one's emotions

Did you not notice that fear, worry, anger, or despondency all interfered with good health? They tended to produce abnormal conditions which could end up in disease—in this case, ulcers

Assisting Normal Function

Likewise please remember that happiness, pleasure in a job well done, and enjoyment, all react together to help the body function as it should

This brings us immediately to the very heart of this question You cannot have good health and good nerves without having good thoughts You cannot have physical health, and harbour thoughts of fear, hate, resentment, jealousy, selfishness, and worry These produce tensions The result is frustration, a sense of dissatisfaction, loneliness, and emptiness in the life Many a person suffering from chronic tiredness is actually suffering from frustration and the sense of failure

Now the next step is to find the remedy for such destroyers of mental health which cause life to be a burden, and, in turn, make physical health impossible

No Appropriate Tablets

In all the books I have studied on medicine, and in the many others you might search, you will find no prescription for tablets which reads "Take these for hatred, fear, and worry" These are conditions for which we find no tonic in the chemist's shop There is no magic medicine or injection that will neutralize meanness, selfishness, and grouchiness The doctors have no serum for such destroyers of mental peace as despondency, uncertainty, or anger And yet, if these are allowed to continue, they can cause severe illness

But there is a remedy, and that remedy is found when a man discovers his Maker The great laws that govern the mind, and will bring you peace and calm assurance, are found in the Bible Here is found the remedy for a selfish and warped life Here only can one find a balm that will satisfy the heart longings, bringing peace and tranquility where once was restlessness and anxiety

The Bible makes it clear that we are naturally self-centred—we want our own way When a person is grown he is supposed to outgrow wanting his own way, but far too many people are still childish. They have never grown up. Emotionally they are babies—narrow, selfish little despots, clamouring always for their own way And people who are thinking only how to please themselves, and how others can serve them are miserable, gloomy, doubting creatures They are violating the law on which all the universe is run. It is the great law of all nature, of life itself—the law of *giving* "God so loved the world, that He gave " John 3 16.

You say, "But, Doctor, I haven't anything worth while to give to people I don't know what it is to be really happy" Let us make a few practical suggestions

Count Your Blessings

Look on the bright side of life instead of on the dark. "What do I have to be thankful for?" you say Well, you are alive—even if you are not wealthy, popular, or famous, just to be able to live is a wonderful thing

Don't hold a post mortem over your mistakes The surest way to ruin happiness is to grade yourself as zero and then keep adding more ciphers because you make that mistake, or said that mean thing "Many walking along the path of life, dwell upon their mistakes and failures and disappointments and their hearts are filled with grief and discouragement"

(Continued on p 24)

CHILDREN SHOULD BE HEARD

MILDRED SCOTT SUMMERFIELD, R.N.

"TAKE that child to a doctor!" Dolores' father always called her child when she irritated him "A week of this spitting out her food is revolting I've had enough" The Dauphin of France with a retinue of royal tasters, couldn't have been more spoiled, he thought

"But she says she can't swallow solid food," Dolores's mother apologized and cuddled her four-year-old close to her protectingly Dolores's male parent glowered at an atoll of pap-like spinach, potato, and grayish shreds of chewed celery around the edge of her plate

Grandma, at the far end of the dinner table, sniffed She was thinking that there were no eating problems in her day Children weren't bewildered by an array of dishes They were hungry and ate without fanfare When a child ate a good meal it was taken for granted, almost as breathing is, not regarded as something as memorable as winning the Vanderbilt Cup!

"She'll eat like a normal child like her sisters here or she'll go to a doctor and we'll find out what the trouble is," thundered Father

The next day Dolores was examined by her pediatrician, who found her throat normal But to give her the benefit of the doubt he recommended that she be taken to the hospital for an examination under the fluorescope For one hundred rupees' worth of laboratory fees it was established, as they say in medical parlance, that findings were negative. There was nothing wrong with her throat.

Still she could not swallow solid food. Every plate was bordered with tiny mounds of rejected food that she insisted choked her The family grew more edgy as the home universe continued to spin about the disturbing spectacle of an apparently healthy child who claimed she was unable to eat.

Dolores's self-respect increased. Her ego was bolstered considerably Why not? Wasn't everybody concerned about her? She didn't pine nor lose an inch of her waistline

No wonder!

Her over-solicitous mother plied her with delicious between-meal drinks—foamy eggnogs, cocoa, and melted ice cream—all good things that ran down the pink throat by the law of gravity It was wonderful being so important

"She can't enter college lugging a drinking tube," roared her father "Take her to a throat specialist"

The town's best throat specialist doubled in old-fashioned homespun wisdom, and could spot the end products of frustration He listened to Dolores's history

Dolores listened too Wasn't he talking about her?

He took a spick-and-span towel, wrapped the pink tip of her tongue in it, pulled it out gently as far as it would stretch, and peered down her throat with the help of tongue depressors and a strong reflected light Then he let that important red tongue snap back into position He moved his head mirror back and said to the patient, "You sit here, I want to talk to your mother."

Behind the closed doors of his private office he told the child's mamma, "There's nothing wrong with your little girl There's something wrong with you or the family You give her too much attention at one time and not enough at another."

He asked many questions, and found that since Dolores had been advanced to eat in the dining room with the family she was on the lower rung of the conversation ladder—a nonentity in the family group.

"Make meal-time a pleasant time, when all are free and equal. Don't let those bigger sisters outshine the junior member! Let her have her two cents' worth of talk. I was a younger brother myself, and there were times when I gladly could have gone in for spontaneous emesis ('vomiting' to the lay ear) to get my relatives to listen to me"

According to the regimen laid down by the last doctor, Mamma stopped all supplementary drinks Dolores was to have skim milk at her meals He assured Dolores' mother that no child ever starved with food in sight He advised smaller servings of food and larger portions of billing on the family conversation programme.

If she didn't start eating normally in a day or two she was to have some friends of her age in to eat with her at a smaller table but in the dining room. She could start by being a free agent among her playmates.

Above all, *no mention was to be made of whether she ate or didn't*

Dolores struggled down bits of

solid food with gulps of milk and water and made numerous grimaces. Nobody paid any attention to her, but when she talked they listened, and politely too. Each meal became an improvement on the preceding one. When at last she cleaned her plate no one yelled "Excelsior," although her parents wanted to do so.

Dolores did only what many other children have to do to get their place in the family's attention Adults who have spouses who "take the words out of their mouths" when they are about to tell their best yarn can appreciate the thwarting that went on in the little girl's growing ego When adults are thwarted they refuse to talk Dolores refused to eat

Children learn early that eating is important and that at meal-time they get special attention and affection They soon learn that they can throw the household into a panic by not eating Spoon-fed children adore being prodded and coaxed, and they become tyrants in no time

During the last twenty years there has been an over-emphasis on food Many faddists have appeared, among them parents who are in a fair way to become nutritional cranks Children catch on to the tremendous importance given to their eating, and it becomes a tool and a way to fight back against a world that is too much for them

Parents can prevent hostility to meals by avoiding highly seasoned or over-rich dishes, introducing a new food in tiny portions, keeping family bickering down to a minimum (children's emotions are easily upset), not nagging about table manners (they improve with age rather than scoldings), giving small helpings, never punishing a child by denying him a meal (he will punish you by not eating at a later time), never rewarding for eating, and laughing with a child, not at him

Help him to want to do what is

good for him, and don't say "no, no" simply to thwart him Don't make your child a victim of your bad temper, your need of blowing off steam, or your own injured feelings Make him happy that he lives at your house Give him the support of real interest in his doings, kind understanding for his shortcomings, and fairness in dealing with him He will be a more balanced person, and others will like him better

INTUSSUSCEPTION—A CHILDHOOD EMERGENCY

(Continued from p 9)

conditions develop, the operation is not so simple, nor sure of good results Adhesions form The imprisoned portions of the intestines become more extensive There is abnormal bending and twisting The involved portion thickens and swells There is often (though not always) a backing up of fæcal matter ahead of the intussusception Part of the intestine suffers damage from the constriction These and other conditions prevent the simple withdrawal of the imprisoned portion by physical pressure In such cases the surgeon must resect the damaged intestine and sew the divided ends together

Old medical text-books give the intussuscception death rate at seventy per cent The conditions they describe were those prevailing at a time when very little was done for the intussusception victim Fortunately, diagnosis and early treatment of this condition have changed the picture The death rate among 610 young intussusception victims treated in the Children's Hospital in Boston was about 2 7 per cent, as compared with 59 per cent in 1908-12

Naturally this brightened outlook is only for those who receive treatment Patients who, through incorrect diagnosis, inability to obtain medical or surgical care, or for any other reason, do not avail themselves of medical advances in this field succumb in a comparatively short time, usually in three to six days

In spite of medical progress, time is still of the essence in treatment. Intussusception is still an emergency, it demands speed, and more speed Physicians familiar with the disease plead that parents get the children to a hospital at once

Drs Robert E Gross and Paul E Ware said in the *New England Journal of Medicine* that this condition "demands immediate recognition and treatment if mortality rates are to be kept at a minimum" They insist that "the mortality rates will more nearly approach zero the more frequently treatment is instituted within twenty-four hours of onset" The interval between the appearance of symptoms and the beginning of treatment they call "of paramount importance"

No physician will argue with Drs Gross and Ware when they say, "A heavy diagnostic responsibility is placed upon the general practitioner or pediatrician [child specialist] who first sees these patients"

But the best family physician or child's physician in the world can do nothing about intussusception (or any other disease, for that matter) until the patient is placed in his charge The primary responsibility for successful treatment and reduction in intussusception deaths rests upon parents Unless they act quickly and wisely, the outlook is still pretty dark So long as a single child is lost, it is one too many.

PROVIDENCE AIDS

IN

EMERGENCY

LT.- COL G. D. CLARKE

THE Waddars are a semi-nomadic race who specialize in stone-breaking They would seem to be, with the Banjaras, the Kols and Dangars and other cognate tribes, the aborigines of the country, who have receded before the conquering Hindus into the hills and fastnesses, and in those wild regions to have continued to maintain their primitive language, habits, and superstitions as well as their physical appearance and in some cases their wild independence

Gangs of Waddars live in the hills North and North East of the city of Hyderabad There they break stone for contractors for building material, and the way they fall upon a range of boulders and reduce them to the dimensions required, is a feat which has to be seen to be believed With bare hands and the crudest implements they swarm over the ground like ants at a cube of sugar, and pulverize huge junks like toffee

During slack periods at stone-breaking, the Waddars take up work by petty contracts They never go out to work, for daily wages They will contract to dig a well, excavate earth by the cubic yard and jobs like that for preference They are well-known as carriers of heavy furniture, and have a special knack of transporting pianos, which earns them a monopoly for handling these delicate musical instruments When moving a piano, they understand about the fragility of the sounding board Lifting a piano, one, two, three, off they march regulating their steps so that they do not walk out of step, the piano thereby is carried along evenly and not subjected to unequal stress and strains

A gang of Waddars had done a job of work at my bungalow one day, and as they were being paid off, one of the gang came up to me, *salaamed* profoundly and mumbled something in the Waddar language, looking backward to where the rest of the gang were receiving payment, as though he wished to avoid the gang knowing what he wanted to tell me I went up to him and patted his shoulder to encourage him, but he couldn't speak the Urdu language and I couldn't understand the Waddar speech

The father of this young man, who was also of the gang seeing him trying to talk to me came up to where we stood "His wife is dying in the hills," the father said, in faltering Urdu "The baby will not come out for two days," he demonstrated with two honest toil-worn fingers "The mother is very weak, perhaps the mother will die tonight," and he squeezed the moisture from his eyes in a helpless gesture

"Would you like me to see your daughter?" I asked the father, as I was not sure whether this class of people allowed a male doctor to attend their women folk in confinement He said they would be most thankful, and both father and son were overcome with gratitude

I had been about to go out to see a patient in the city, and invited them into my small car to show me the way My medical practice often takes me to outlying farms and villages I have a great respect for the frank honesty of these hardy people, and was very glad to be able to be of use to them now

On the way the father told me that the mother of the girl would not allow them to take the case to a hospital, and that they had paid Rs 20 to someone who attended women in child-birth, but the woman could not get the baby out though she had tried for four hours

Presently a cart track left the main *morrum* road and the men directed me along it The low clearance under my small car would not permit it to go more than a few hundred yards, as the ruts on the track had raised the middle part and there was a danger of damaging the differential of the car

We got out of the car and stumbling through thick red mud and shrubbery made for four or five huts in the lee of a large boulder The men stopped before a low hut and pointed inside The entrance to the hut was about 3 ft. by 2 ft., the roof of palm leaves, grass, and

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Lt.-Col. G. D. Clarke, a medical practioner, has sent in this very interesting account of how he has to depend on divine guidance and help in ministering to the needs of suffering humanity.

(Left) A typical hut constructed by the Waddars, made of mud and thatch. (Right) Some of the huge boulders that the Waddars break up and pulverize in the course of their work

pressed out kerosene oil tins I squatted and shuffled into the hut on my feet The interior of the hut was full of smoke and very dark, I couldn't see, as the acrid smoke smarted my eyes and nose, so I shuffled out backwards, and coming out told the father to have the fire in the hut extinguished

After a while I went in again and saw a young woman of about 25 years of age, lying on a date-mat on her side, and her mother weeping beside her I called the father into the hut and told the women not to fear, that I was a doctor and would help to get the baby out

The women were now somewhat used to my presence and I questioned the mother about her daughter's condition By external examination through the abdominal wall I found that the womb was contracted firmly and was trying to force the baby out against some obstruction that was holding the baby back The patient's pulse was weak and thready, the breathing sighing and the body felt clammy to the touch There wasn't much time

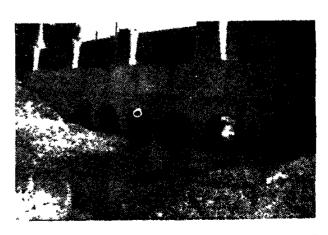
The first thing was to get a light, the torch from the car, and then to clean things up as far as possible Coming out of the hut I sent for my emergency medical bag from the car in which there was a 3-celled electric torch. The only disinfectant in the bag was some crystals of permanganate of potassium which was contained in the haft of a snake-bite lancet and which I always carry about in my bag for emergencies against bites of poisonous snakes

I shook the crystals of permanganate (about 2 dr) into the family drinking water supply which was stored in an earthen pot, and with a dipper, made of a half coconut shell at the end of a stick that is used for taking water out of the pot, I had the mother wash her curry soiled hands repeatedly The mother understood a little Urdu, and the father who was sitting outside by the entrance of the hut with his back against the wall kept interpreting

It was a case of transverse presentation The fœtus was lying impacted across the outlet, and it was being pressed down by the contractions of the womb The bag of waters had ruptured and there was a good deal of dried blood and oil about the parts and on the mat on which the patient lay It was necessary to get the womb to relax by anæsthetizing the patient, and then to turn the baby by coaxing it by manipulations with my hands through the abdominal walls, so as to make the fœtus come into the centre line of the womb, "like a piece of stick fixed crosswise in the neck of a bottle" as I explained to the mother

By great good fortune I had that morning purchased a bottle of chloroform for use in my surgery and by greater good luck I had forgotten to take it out of my bag when I got home as I had intended

(Continued on p 29)

The incident mentioned in the story occurred in the third hume pipe from the left in this culvert. There was no water in this stream at the time.

THE BLOOD IS THE LIFE

HELEN SPICER MENKEL, R.N.

THE expression "the blood is the life" is familiar to us all But how few of us ever stop to think just how important blood really is to life If you were going to build a house or construct a complicated machine you would spend plenty of time studying plans and learning what materials would be best to use When you buy a car you read the instruction on caring for it and getting the best performance out of it

How differently we treat the mechanism of our own body We spend very little time studying the needs of this body and the fuel that should be used to keep it in the best running condition We take so much for granted that we are surprised and annoyed when we have to be held up for repairs

We think we should go along year in and year out doing whatever we please with our human engine without making any checks

You are in charge of the most complicated piece of machinery ever to be manufactured Yet you spend less time finding out how to keep it in good running order than you do for your car or your automatic dish-washer.

When you understand the blood manufacturing plant in your body, you will want to keep your life line—your blood—in the best condition

Your blood is made up of many different parts, each one having its own duty Blood acts as a carrier of oxygen from your lungs to your tissues It acts as a carrier of body wastes to the organs of disposal It acts as a carrier of secretions from an organ to another part of the body It is an equalizer of body functions

Most of the immune bodies that act as a barrier to infection circulate in the blood serum The clotting ability of the blood holds the power of life and death every minute of the day and night

Of course you want to know what you can do to help your blood perform its normal functions

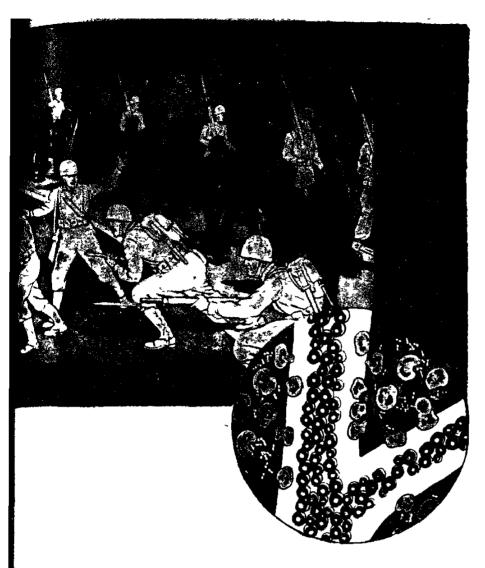
Red blood cells are tiny discs that carry the oxygen, the vital food necessary for all tissue development There are about one trillion of these tiny cells in your circulation at all times The red cells are manufactured in the marrow of the long and flat bones. They need certain substances in order to promote growth and development, and this is where you can do something to ensure normal production of these precious red cells

There are three fundamental requirements for the normal development of red cells in the bone marrow

First of all, they must have all the essential food elements needed in the nutrition of any body cell These food elements are found in a well-balanced diet consisting of proteins, carbohydrates, fats, vitamins, and minerals

The second essential building material is iron

The third basic material is found in the secretions of the stomach It is necessary for the maturing of the cells When the red cells are sent into the circulation they do not possess the power to multiply They live only about thirty days Normally, hundreds of thousands of them are destroyed each day

The spleen has the power to destroy the red cells It is through this destruction that iron and bile are released, to be used over again Most of the iron contained in the red cells when they are destroyed is released to be used again by the bone marrow in the manufacture of more red cells. A small portion

of it is put away for storage, so that there will always be an iron reserve for emergency

If the manufacture of red cells in the bone marrow keeps pace with the destruction of the cells by the spleen, the result is a normal red-cell count If the destruction of the cells and hæmoglobin, or iron content, is more rapid than the manufacture, you will have a condition commonly called anæmia. The cause can be traced to some fault in this balance between the manufacture and the destruction of the red cells and their iron content

When you are anæmic it is only by means of a count of your red cells and a determination of your hæmoglobin percentage, or colour content, that the physician can know what is needed to correct the deficiency By this method alone can the type of anæmia be determined and the proper treatment be given

There are several types of anæmia, or red-cell deficiency There may be plenty of red cells in the circulation but because you have a shortage of iron colouring matter for each cell, they may be pale and mis-shapen Lacking the iron, they are not able to carry the needed supply of oxygen to the tissues, and you develop that "tired feeling" You may need to eat food containing more iron.

Perhaps the stomach has lost its power to absorb iron from the food, because of the lack of some stomach secretion. There may be a chronic infection that is having a depressing effect on the bone marrow, the bone marrow may lack the power of manufacturing enough cells, or it may lack that factor needed to develop the cells to maturity The cells that are thrown out into the circulation are large, abnormal, and few in number This condition of the blood is found in pernicious anæmia and tropical sprue Some of the anæmias found in pregnancy belong to this class

Science has found that liver contains this needed maturing factor, and in the last few years through much research, scientists have been able to isolate the lifesaving crystals of vitamin B_{12} Scores of people will owe their lives to this vitamin

You can readily see how important a blood count becomes It is an indicator of the balance between blood manufacture and blood destruction

If anæmia is present, by means of the count the physician knows what fundamental substance is lacking and what needs to be supplied before normal production can be resumed To blindly take iron when it may be liver or vitamin B_{12} that you need is only working in the dark Your blood will not be restored to its normal working capacity

Another important function of the blood is to combat infection Within the blood serum there are substances with the ability to

Rich red blood means robust health. Here's how your blood keeps you well.

destroy, surround, or clump harmful bacteria that find their way into the body, and prevent them from causing disaster These substances are called antibodies They are built up by the body tissues They are the reserves that immediately start working when the alarm is sounded that an invader has broken down the natural barriers and entered the body

These antibodies are produced to combat specific bacteria If you have had typhoid fever, for instance, you probably will not have it again Your body cells have developed specific antibodies, which immediately gather typhoid germs into clumps and keep them from reaching the tissues, where they could cause the disease again

As long as these antibodies are in the blood serum in sufficient numbers you will not contract the disease But when they disappear your immunity against typhoid fevers is over, for your standing army is gone This is the reason for giving injections against certain dangerous diseases, such as smallpox, typhoid, and diphtheria The inoculation of dead or weakened bacteria into the tissues of a person who has not had the disease will cause the cells of the body to begin manufacturing the antibodies that will protect him if he comes in contact with those specific germs

Some types of bacteria produce poisons, or toxins It is these toxins that cause severe symptoms and even death in many diseases

For protection against these diseases, such as diphtheria and tetanus, a modified toxin can be injected The body will then produce another type of antibody called antitoxin When these bacteria or toxins are inoculated into the body there is at once a reaction to these foreign substances The cells begin to make specific types of antibodies for the present emergency and also for future protection. When enough of these antibodies have been sent into the

blood, the body is immune to a second attack

The cells continue sending out these research reserves In some diseases one attack or one vaccination may be enough to give immunity for life In other diseases the immunity lasts for only a few months or years

There are germs that can enter the body that do not cause a specific disease, but nevertheless can cause serious trouble and even death Your blood is prepared to take care of these enemies The blood has still another standing army to protect you The white blood cells are the front-line reserves They are always prepared for combat Just prick your finger with a needle or pin carrying bacteria on its point It won't be long before you will have a red, swollen, and painful finger As soon as the bacteria enter your tissues the blood sends white cells to the spot in great numbers These cells engulf as many bacteria as they can in an attempt to destroy them When they have absorbed as many as they can digest, they will break down These dead white cells then lose their form and become pus As the blood flow carries more and more white cells to the injured spot, there will be more and more blood present there, more pus will be formed, and your finger becomes larger accordingly, until the pressure causes throbbing and pain As the pressure increases, the skin will break and throw off the pus and the germs Or perhaps a physician will have to open the wound and allow the pus to be released before you can get relief from the pressure.

There are other infections inside the body that are continually a source of danger if they are not checked before they cause too much damage This type of infection cannot be determined except by means of a blood count The white-cell count is an important index to the presence of infection and the resistance of your fighting force

A higher white count than normal will show that there is an infection present, because the body has sent out a great many reserves, or white cells Nature is always generous, and to protect you fully she sends out more than are needed

There are several types of white cells, and they follow certain normal percentage patterns These percentages change in the presence of different types of infections If the resistance is low or the infection overwhelming, the white count will be below normal instead of being increased, as is the usual response One type of white cells shows an increased percentage in most types of infection If the white count is low but these cells have increased, the physician knows that there is an infection present and the resistance to that infection is low, for the white cells have not responded

If you have a suspected inflamed appendix, the physician will immediately want a white-cell count and a check on the kind of white cells present

You can see how important a full check on your blood is to you and your physician A blood count should be done at least once a year, when you go to have your yearly physical examination

You can help keep your blood in good condition by obeying some of the simple laws of health See that you have a well-balanced diet containing satisfactory amounts of basic foods This diet will help put the bone marrow in condition to

manufacture enough good blood cells See that your food contains the necessary iron content, so that your red cells will have their normal colour and oxygen-carrying capacity There are drugs and poisons that you take into your body that depress the white cells, and thus you may lose much of your power to resist infection Allowing chronic infection such as infected tonsils and teeth to continue tends to lower your resistance

Nature has given you a wonderful blood machine What are you doing to keep it in good condition?

HOW LONG IS A DREAM ?

W. S. SCHWEISHEIMER, M.D.

IN THE bedroom a book falls to the floor with a loud crash The sleeper awakens At the very moment of waking he hears but the last echo of the noise But in the single second that elapsed between the fall of the book and the rousing of the sleeper's consciousness, the noise of the fall produced a whole series of illusions in the mind of the sleeper

He sees artillery being marshalled, the germs directed, he hears an order to fire and the roar of the cannon

A French scientist once dreamed he was back in the terrible days of the French Revolution He was brought before the tribunal, he saw the famous figures of the Terror, he was condemned and conveyed to the place of execution He saw himself mount the scaffold, heard the knife of the guillotine fall, and felt his head being severed from his body

He awoke terrified The carved decoration on the head of his wooden bedstead had fallen down, and like the knife of the guillotine had struck his neck The whole story sprang from the falling of the decoration

From experiences such as these, scientists who are interested in the nature of dreams draw the conclusion that the exact duration of a dream cannot be fixed However, not all scientists are satisfied with that opinion. They claim that it should be possible at least to find out whether the duration is long or short

Professor Klein, of Texas, carried out a strange series of experiments in his laboratory in order to clear the problem Several of his students were checked as they sleep In their sleep some form of irritation was practised upon them through the sense of hearing, the sense of smell, or some other sense A stop watch recorded the beginning and the end of the period of irritation of the sleeper who had been asked to observe his dream carefully and relate every detail

To one sleeper the word "Fire!" was called out

He reported these incidents "I was driving in a car near my house I heard a cry and stopped the car Another car had fallen over the cliff An injured man crept out of the wreck There was another person under the car, a woman, who was seriously injured The injured man and I together carried her to the hospital"

The signs of irritation in the sleeper gave way The sleeper was awakened. The watch registered twenty seconds as the duration of his dream

The experience of falling lasts only a short time, but in sleep one has the sensation of plunging into great depths This usually happens soon after one falls asleep, and is caused by movements that influence the centre of body balance This was proved by an experiment in which the subject was placed on a couch with his head resting on a pillow When he was asleep, quick pressure was put on the couch near his feet, causing them to sink a little lower than the rest of his body Instantly in his dream he felt himself falling down—down—down.

The same experiment may produce different dreams in different persons When a number of sleepers were stroked with a piece of soft material, one man dreamed that a cow licked his hand, another that a girl friend softly patted his hand as he lay ill in the hospital, a third that a large dog snuggled against his hand, a fourth that an Angora cat rubbed against his arm In all cases the duration of the dream was very short

A man may be observed thrashing about in bed for hours on end, during which time he is dreaming almost continually But it is a fact that most dreams last an infinitely shorter time than the events they record would demand

The shortest dream recorded lasted only five seconds, the longest, ninety seconds The most common duration was about thirty seconds It is fairly certain, however, that there are dreams that last much longer

Reports of artists and poets show that often a work of art is inspired by a dream

Goethe was a thorough self-analyst He said of his work that what he became aware of during the day often built itself up in a regular dream at night, and when he opened his eyes again he found he had dreamed either a wonderful new story or the continuation of something already begun

According to the well-known term, dreams are simply foam, foam that bubbles and disperses on the surface of consciousness This foam originates in a definite event or suggestion To make all this clear is another goal in the great game of scientific research.

KIDDIES' KORNER

"I'D RATHER . ."

WINNIFRED J MOTT

"ONE, two, three, four All annas this time" Mrs Sadiq counted out the coins into her small daughter's eagerly outstretched hand

"Thank you, Mother" Shalini ran up to her own room as fast as she could go Only fifty annas more, and then she could have that beautiful doll, the one she had had laid aside for her at the store some time before As she put the money carefully into her bright red purse, however, she was worrying a bit about her mother She wasn't as cheerful as usual, it seemed—and there was a tiny pucker between her eyes sometimes, as if she were thinking about something not too pleasant What could be the matter? Shalini wondered

She now decided to go over and see her best friend, Susie John who lived next door That little girl was just wiping the dishes for her mother as Shalini arrived

"Oh, come in, Shalini," she invited "I'll be through in a minute" Soon she polished the last plate and cup with a flourish, and hung up the towel

"Thank you, my dear," said her mother, and gave Susie a quick little hug as she said it

As the two girls went up the stairs to the playroom, Shalini was thoughtful "Doesn't your mother pay you for doing the dishes—wiping them, I mean?"

Susie seemed surprised "Why, no," she responded promptly "I want to help her, and besides, I like to do it If I need money, of course she or Daddy gives it to me."

After the two girls had played for a while, Shalini went home, doing some sober thinking about herself

After that, whenever she happened to be at Susie's house at the same time of day she noticed (which she never had done before the tiny puckers appeared in mother's forehead) that her young friend received a "Thank you, dear," a loving pat on the shoulder, or some other mark of affection and appreciation every time she washed or wiped the dishes She remembered that her own mother never said anything like that to her "Maybe," she thought sadly to herself, "she thinks it's pay enough when she gives me the four annas Oh, I wish she'd say 'Thank you, dear,' *too,—or something* Something besides 'Here's your four annas, Shalini' "

That evening Shalini overheard a conversation between her parents She hadn't meant to listen, but when she heard Daddy say, "It means I can't get you that new pair of shoes for a while, dear," she couldn't help listening to her mother reply "Well, my old ones will last a little longer, so don't worry"

Shalini wondered what it was all about Had Daddy lost his job

—or was he ill—or what? Remembering her little hoard of money upstairs in a red purse, she felt ashamed to think that she had been planning to get a doll which she did not need She remembered, too, that mother's shoes were looking very shabby.

The next evening after the dishes were done, the usual money was handed to Shalini, but she put both hands behind her back, to Mother's surprise.

"Don't you want it?" she asked "Do you have enough for your doll?"

The little dish-wiper shook her head "I—I guess I'd rather hear you say, 'That's my good girl,' or 'Thank you, dear,' or something like that," she stammered "That's what Susie's mother says Sometimes she gives her a hug—like this" She put both arms around her mother

Mother returned the hug "Why," she said lovingly, "I could say it anyway You *are* my good girl, but I thought you wanted to earn some money for the doll—and you don't have a weekly allowance, so—"

Shalini shook her head again harder this time

"I don't need an allowance," she said firmly "Susie doesn't have *one* And I don't need the doll But you *do* need new shoes" At her mother's startled look she nodded and said, "Yes, I heard you and Daddy talking Now I know why you've had that funny little pucker here—" and she touched gently the space between her mother's eyes. "What is it, Mother? Has Daddy lost his job?"

Her mother smiled "No, dear, nothing as bad as that. But he is to be transferred soon to another one a long way from here So of course I want to save where I can because moving costs a great deal I have been feeling rather upset" she admitted, "leaving our friends here, and everything."

Shalini suddenly realized some-

thing Why, that meant that she would be going a long way from Susie, too; but they could write to each other Feeling rather sad herself, she knew that she must do all she could to help. She took from her apron pocket the rupees and annas she had been saving, and handed them to her mother.

"That's to help toward getting us moved," she said, starting to leave

Her mother tried to hand the money back to her.

"The little bit I pay you for wiping dishes won't make much difference," she said quietly. "Besides, you'll have to pay for and take the doll you had laid aside, you know. How much do you need?"

"I don't need any more, because I'm going to tell the store man that he can let the other girl who wanted it—he—he can let her have it. And I don't want to be paid for doing dishes again."

She started up the stairs to her own room Much to her surprise she felt happier than she had ten minutes before Bearing a light step, she turned about to see her mother standing in the doorway

"Thank you, dear," she said.

HOMEMAKERS' HELPS

RECIPES

Vegetable Soup

One cup raw potatoes; ½ cup raw carrots; 1 cup kale or green part of cabbage; 1 medium-sized onion; ½ stalk celery; 1 small turnip, parsnip, or oyster plant; 2 tablespoonfuls red pimiento; 1 clove garlic if desired; 1 cup rolled oats; 1 tablespoonful butter.

Cut the raw potatoes, carrots, kale, onion, celery, and turnip with the coarse blade of the food grinder. And pimiento, and garlic if used Cook in about 2 quarts of water Add the rolled oats and cook until tender Thin, and salt to suit taste Add butter and serve hot About 6 servings

Seashore Chowder

One cup milk; 1 cup water; ½ cup dried corn, soaked, and cooked till tender, or 1 cup canned corn; 1 tablespoonful butter substitute; 3 small onions (diced); 1 cup diced potato; ½ cup diced homemade nutmeat; 1½ teaspoonfuls salt.

Cook the onion in the butter substitute five minutes. Add the water and potatoes, and cook till potatoes are tender Add milk, corn, and nutmeat, and re-heat

Nutmeat

Two cups peanut butter; 1 cup flour (browned to a golden brown); 3 cups tomato juice; 1 teaspoonful salt; 1 chopped onion.

Work peanut butter and 1 cup water together, add portions of flour and tomato juice alternately Add salt and onion Steam in large, buttered double boiler for 5½ hours Let cool, and turn out onto plate Slice and serve cold, or fry and serve with tomato sauce or gravy Makes about 6 servings.

Three-in-One

Six carrots; 6 onions; 10 potatoes; salt to taste; 2 tablespoonfuls butter; ½ cup rich milk.

Boil carrots and onions together and potatoes separately When thoroughly cooked, put together and mash, after they have drained well. Add salt, butter, and milk Serve hot A gravy may be made from the broth. Serves 6 to 8.

Browned Flour

Put white flour into a dry pan over slow heat Stir frequently until evenly browned, but do not burn When cold, put into sealed jar Keeps indefinitely, and always ready for thickening gravies, stews, etc

Italian Eggs with Cheese

Three tablespoonfuls butter; 4 tablespoonfuls flour; 2 cups tomatoes; ¼ cup chopped celery; 2 tablespoonfuls onion; ½ teaspoonful salt; ½ teaspoonful paprika; 4 hard-boiled eggs; 1/3 cup grated cheese.

Melt butter and add flour Blend, add tomatoes, and cook until thick Add celery, onion, salt, and paprika Pour sauce over sliced eggs that are in the oiled baking dish Sprinkle with grated cheese and bake 20 minutes at 350° F Serves 4

Sago Pudding

One quart water; ½ cup brown sago; 1/3 level teaspoonful salt; 2/3 cup sugar; ½ cup dates, stoned and cut into small pieces, or raisins; 1 tablespoonful lemon juice.

One fourth cup walnuts may be added, if desired, instead of dates or raisins

Soak the sago in one cup of the water for half an hour Heat the remainder of the water to boiling, and stir into it the soaked sago, the sugar, and the salt Cook in a double boiler, stirring occasionally, till the sago is transparent, which will require about twenty minutes Then stir in the lemon juice and fruit Serve either warm or cold with cream

Caramels

Two cups sugar; 1½ cups corn syrup; ⅛ teaspoonful salt; 2 cups cream; ¾ cup evaporated milk; 4 tablespoonfuls butter; 2 teaspoonfuls vanilla; nut meats.

Put together in heavy saucepan sugar, syrup, salt, and half the cream Bring to boiling point, stirring constantly Gradually add remaining cream and milk Cook to 238°F Add butter, and cook to 248°F Remove from fire; add flavouring and nuts Stir

HOW TO COMBAT NERVES, FEAR, AND WORRY

(Continued from p 13)

Don't utter a word of doubt to others Often our friends can help us, and a word of encouragement has helped many an individual over a rough spot in life, but it can be an injury to you and it doesn't help other people if you keep going over and over again the same discouraging picture "Nothing tends to promote health so much as a spirit of gratitude and praise" which comes from trust in divine power What men need today is to be brought into connection with God He is the only One who can present you faultless and change you, for He is the very God of peace who sanctifies men physically, mentally, and spiritually Take your troubles, your doubts, your worries, your fears to God in prayer You've tried everything else, why not try God *once?* He is near to you and will help you when no one else can "He careth for you" 2 Peter 5 7 "Come unto Me, all ye that labour and are heavy laden, and I will give you rest" Matthew 11 28 Then you will be able to say, "I can do all things through Christ which strengtheneth me" Philippians 4 13

DEVELOPING A BALANCED MIND

(Continued from p 7)

They are then acted upon according to the needs of the body as a whole Thus one set of impressions from our ears may inform us that we are in imminent danger of being run down by a train that is rushing along at top speed But at the same instant another set of impulses from our eyes will perhaps inform us that we are standing on the station platform, and that we have nothing to worry about Except in pure reflex actions that occur automatically, the brain must make the decision as to whether we shall stand just where we are or move away In such a case judgment must supersede fear

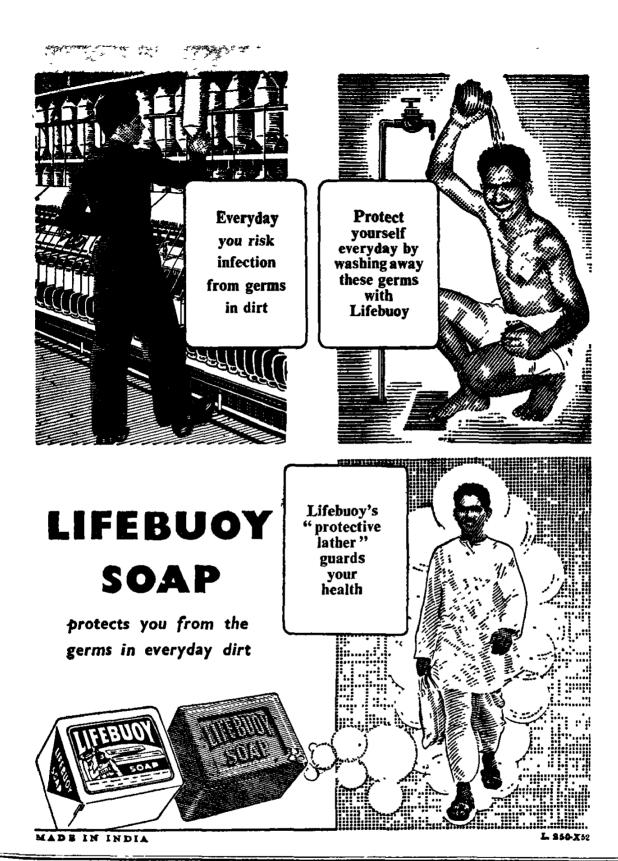
Many of our reactions are rapid and completely automatic Thus if we accidentally touch something hot, we instantly pull the hand away We do this without thinking This is what we call a reflex reaction It does not require the brain to make a decision In fact, this reaction will occur even though the spinal cord has been severed from the brain This means that such an action is below the level of conscious thought But although there are many of these reflex reactions that are absolutely necessary to our comfort and safety, there are many others that require a great deal of thought in order that we may reach a suitable decision Such processes of thought are handled in the higher centres of the brain

But the most wonderful structures in the human body are those large nerve cells on the surface of the brain, wherein are located the functions of memory, reason, and judgment These are the cells that govern our behaviour and our ability to learn from the experience of earlier generations These are faculties that even the highest animals do not possess to any degree worth mentioning Of all creation, man stands alone in his ability to record the past, and to interpret the events of today from the experience of previous generations a thousand years ago No animal has the intelligence to read the first simple words that every child learns at school

Some animals are very clever at tricks that they have been taught But they have no ability to store up knowledge in books for the instruction and guidance of future generations Man alone possesses this most important faculty He has possessed it through all the long generations of the past There is nothing accidental about this. Man was given dominion over the whole animal kingdom by the Creator Himself. That is why man alone possesses the priceless gifts of reason and intelligence.

Jungle Apes Help French Explorer

Some years ago a French explorer was travelling through the jungles of Africa On rising early one morning he was surprised to find many small piles of sticks and wood neatly stacked along the path he was travelling Thinking that the local inhabitants were unusually kind, he asked his native guide the reason The guide smiled and pointed to the trees, which were full of chattering apes These animals had observed the travellers gathering wood for their fires at night, just as their ancestors had observed the natives doing for generations before But having done this, the apes could do no more With all their ability to mimic man they could never learn how to build a fire to serve any useful purpose in their own lives Even a simple fire is too mysterious for any animal to try to understand It takes the mind of one who has been made in the image of God to understand how to build a fire for something useful, whether it be to cook food, to make bricks, to melt and mould steel, or to drive a speeding locomotive or a mighty ship at sea

There is no limit to what the human mind can accomplish when it has been rightly trained The mind of man is of far greater importance than all the material riches that anyone may possess Nothing is more tragic than to see some scatter-brained, loose-thinking individual inherit great wealth, for it inevitably melts away and disappears into the hands of thieves and scoundrels Wealth may be an asset, but nothing in all this world can ever equal intelligence A man may be poor in this world's goods and yet he may write his name among the immortals, because of his capacity

to think and to create that which will benefit the whole human race

If you want your children to succeed in life, teach them to be self-reliant, give them the chance to think things out for themselves A well-trained child will always choose the right way in life, provided at least one parent or teacher sets the right example Every young person should be taught to earn his own living, so that his life will be balanced and useful to the community in which he lives He can do this only by the proper training of the mind Life will then become a pleasant and rewarding experience for him and for his whole family, and he will feel in every part of his mind and body that it has been good for him to be alive!

CONSTIPATION: *Ques—"What is the treatment for constipation?"*

Ans —Normal functioning of the bowels is dependent upon a number of factors. 1. Good general health and nervous stability 2 Adequate bulk in the diet as provided by free use of fruits and vegetables 3 Adequate fluid intake (free use of water between meals) 4 Adequate mineral and vitamin content in the diet, that is, calcium as in milk, vitamin B complex as in legumes, nuts, prunes, whole grain cereals 5 Normal thyroid function (persons with impaired thyroid function tend to become very constipated) 6 Adequate exercise

?

REMOVAL OF SUPERFLUOUS HAIR Ques—"How may I permanently stop the growth of hair on my chin and upper lip? I am a young girl and am greatly embarrassed by this growth to move in society"

Ans—I would suggest the following formula to be used as instrumental for the removal of superfluous hair —

Sodium Sulfide	10 gm
Glycerin	10 c c
Spirits	5 c c
Water	74 c c
Perfume	1 c c

Apply to area and allow to remain for ten minutes, then wipe off Cleanse with water and apply cold cream

?

ASTHMA Ques 'Is there any cure for asthma?"

Ans—Asthma may sometimes be cured in young people by proper habits of breathing and correct posture In older folk a change of climate sometimes brings miraculous relief With most people, however, it is necessary to give some form of medicine, which will dilate the air tubes and thus relieve the asthmatic condition It is necessary to prevent colds of upper respiratory infection which aggravate asthma and to take large quantities of fluids as asthma is made worse when the tissues are dry

?

BALDNESS· Ques—"Is there any treatment, hair oil, ointment or tonic to prevent baldness?"

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2 No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases

3 All questions must be addressed to The Doctor Says Correspondence personally with the doctor is not available through this service

4 Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES Answers cannot be expected under ONE MONTH

5 Questions sent in on Post Cards will not receive attention

6 Make questions short and to the point Type them or write them very clearly

7 Questions and answers will be published only if they are of such a nature as to be of general interest and without objection but no names will be published Address 'The Doctor Says, Oriental Watchman and Herald of Health P O Box 35 Poona 1

Ans —There is no medicine to get hair to grow on a bald head

?

GAS TROUBLE Ques—"I have had chronic gas trouble for the last twenty five years No treatment has given permanent relief What do you suggest as being the best help?"

Ans—Chronic gas trouble may be due to a bowel infestation such as with Amœbiasis, the wrong combinations of foods or to the simple habit of swallowing air I would suggest that you place yourself in the hands of a well-qualified allopathic physician He would do a test of the stool, and could determine if you are troubled with Amœba or some form of bacteria He would be in a position to provide proper medicine to clear up such infections Gas forming foods are the coarse vegetables, uncooked starches and the legume seeds such as peas, lentils and beans and so forth, from which the outer covering has not been removed Some people also have an allergy to foods which cause gas Each person should find out for himself which foods he cannot take and then eliminate them from his diet Fruits eaten between meals, even fruit juices containing some pulp cause flatulence with some, so I would urge that you confine yourself to three meals a day and take nothing between meals.

If you are an air swallower (you might not even know it), all you have to do is, break yourself of the habit.

?

WEAK DIAPHRAGM· Ques—"I have what my doctor calls a weak diaphragm What causes this, and can it be cured or strengthened? I am said to have pernicious anæmia and have tingling in hands and feet I also am subject to very frequent colds and just can't seem to check them"

Ans—Pernicious anæmia is usually associated with generalized muscular weakness There are oral preparations for treatment of pernicious anæmia containing the important intrinsic factor, but as a rule liver extract by injection is prescribed Liver extract is assayed according to its vitamin B_{12} content Formerly doses of 15 units or micro-grams of B_{12} every two weeks were given by intra muscular injection Some authorities have recommended lately the dose be increased to fifty micro grames Response to this treatment is very dramatic General health is much improved also resistance to colds Diaphragmatic breathing strengthens the diaphragm and increases vital capacity The important thing is to expand the lower chest and upper abdomen on inspiration and to exhale with the aid of the abdominal muscles This takes practice

?

HEART BLOCK Ques—"I have been informed that I have a Heart Block What are the chances of recovery? My pulse is irregular, I have pain in the region of my heart and at times pains in upper chest and across the upper abdomen What can be done to help this condition?"

Ans—The average life expectancy after the onset of almost all forms of heart disease is about ten years Naturally some live longer Strenuous exercise of course is contra-indicated Walking on the level seems to be the best exercise to take Climbing one flight of stairs once a day would seem to be the maximum advisable Smoking is inadvisable Salt and foods with high salt content should be restricted This would include meat and fish, olives, pickles, et cetera

HOW TO FEED YOUR BABY THE FIRST YEAR

Variety is the foundation of good nutrition. Every day your baby should have some food from each of the Basic 7 Food Groups below. Timing and quantity of new foods depend on the individual baby and his doctor's recommendations.

	GROUP 1 Leafy, Green and Yellow Vegetables	GROUP 2 Citrus Fruits Tomatoes	GROUP 3 Potatoes and Other Vegetables and Fruits	GROUP 4 Milk, Cheese	GROUP 5 Eggs	GROUP 6 Bread, Flour and Whole-Grain or Enriched Cereals	GROUP 7 Butter or Margarine
1 TO 5 MONTHS	Strained carrots, peas, spinach, green beans, sweet potatoes, squash	Orange juice Tomato juice (for vitamin C)	Strained vegetable soup, mixed vegetables, beetroots. Strained fruits, such as apple-sauce, apricots, peaches, pears, bananas, prunes, papaya.	Milk formula Milk	Egg yolk—hard boiled and put through a strainer.	Cereals cooked at home and strained—oatmeal, wheat, corn, barley, rice.	Fish-liver oil (for Vitamin D)
5 TO 10 MONTHS	Chopped carrots, spinach, green beans, squash, sweet potatoes	Stewed tomatoes, fresh or canned, strained to remove seeds. Grapefruit juice	Baked potato Chopped mixed vegetables Baked apple, pear, banana.	Milk soups, flavoured with vegetables. Simple milk desserts—rennet, custards, cornstarch puddings, Cottage cheese Limit sweet foods.	Egg yolk—hard boiled and put through a strainer.	Zwieback Dry toast, whole grain. Milk toast Semolina Arrowroot biscuits Graham crackers.	A little butter or margarine
10 TO 12 MONTHS	Finely shredded salad greens Grated raw carrots	Broiled tomatoes Sliced orange Lemonade (weak)	Boiled or mashed potatoes, sweet potatoes, lima beans. Fruit juices	Buttermilk, milk shakes, gelatine, tapioca and rice puddings made with milk. Mild cheeses	Whole egg boiled or poached.	Bread whole wheat or enriched Noodles, spaghetti, macaroni, rice.	Butter or margarine in slightly larger amounts.

SHOULD WOMEN SMOKE?

(Continued from p. 11)

to their personal habits. I have found that they are often afraid to read discussions in scientific magazines that have repeatedly confirmed every warning against tobacco. Yet I have challenged scores of doctors with these facts as affecting the health and welfare of their own wives and daughters. They have admitted the truth. Some declared vehemently, "We hate it more than you do." But as a matter of policy, in public, or in advising their patients, many of these doctors have little to say against smoking by women or anyone else.

Further evidence that the medi-

cal profession as a whole and obstetrical specialists in particular have observed the extremely harmful effects of smoking on mothers was brought out through a questionaire sent out by a prominent obstetrical specialist to the members of a national obstetrical association

When these obstetrical specialists were asked, "In your opinion, does the smoking and inhaling of twenty-five or more cigarettes daily have an unfavourable effect on maternal health?" 84 per cent of the replies were "Yes," 2.66 per cent were "No," 5 per cent were "I do not know," and the remainder were modified.

Many of the doctors mentioned effects on their patients they had observed. Among these were: "Causes collapse of the nervous system, interferes with the development of the unborn child, destroys appetite, causes insomnia and failure to gain weight, increases pulse rate, causes annoying cough, causes bad mouth, bronchitis, and tracheitis, produces tendency to stomach and bowel disturbances, interferes with lactation, harms young mothers who have not attained growth, and harms by inhalation of poisons in tobacco smoke."

In summing up the facts brought out by his questionnaire, the researcher declared that one of the greatest objections to smoking by women is that they do not try to quit the habit or even smoke in moderation "when the privileges, obligations, and duties of marriage, and later, of child-birth, make this desirable or even imperative." Surely most women would not risk danger to their child if they knew the facts.

We agree with this doctor that "cigarette smoking has a degenerating influence in many ways upon every girl and woman and that it is prejudicial in every way to their highest efficiency as sweethearts, wives, and mothers."

PROVIDENCE AIDS IN EMERGENCY

(Continued from p. 17.)

to do. I sprinkled about half an ounce of chloroform on my handkerchief and gradually decreasing the distance between the handkerchief and the patient's face soon got the patient breathing the vapour. With a few deep breaths she went under the effects of the chloroform and started to breathe deeply and noisily.

I kept pouring dipperfuls of lotion on the mother's hands as she pressed the presenting part gently upwards with her palm. After ten minutes or so I tried to turn the baby by external manipulations, but the womb was in tonic contraction and I couldn't make any progress. My head swam with the chloroform vapour in the stuffy hut. The electric torch flickered and dimmed, which was a sign that the cells were nearly exhausted — the light may last another five minutes. The only other source of light in the hut was a wick of rag burning in a saucer of oil above the fire place, the flame of which danced with every gust of wind that came in through the doorless entrance and threatened to set the thatch ablaze.

What was I to do? My wrist-watch said ten o'clock I thought of the bright light in my consulting room, and then of the case of midwifery instruments, shining sterilized forceps, cranioclast, decapitating hook and all the rest of them in the electroplated presentation case in the almirah in my bungalow five miles away To speed there and back was out of the question I tried version after another inhalation of chloroform The sweat of anxiety added to the sweat of the airless hut At home the family would be in bright electric light, the radio would be on, at ten o'clock. "Have Faith in God, Dear Friend Hove Faith in God" I seemed to hear the voice of the speaker of the "Voice of Prophecy" as I have often heard him at ten at night ending a half hour of prayer "Have Faith, Dear Friend" the words kept repeating themselves until I unconsciously said them aloud as I racked my mind while I dripped lotion on the mother's hand.

Suddenly the mother exclaimed "Ai!" and I saw the fœtal head in the mother's eager hands. I was as much surprised as the mother I cannot explain the mechanism or what axes of force must have

brought about a spontaneous expulsion of a seemingly hopelessly impacted cross birth.

My trouble now was to prevent a delighted mother from dragging the baby out. I kept telling her to support the head and the baby would come out by itself. The old father added his advice from outside the hut and the husband too came along and shut out the little twilight that came in through the entrance. Presently the baby was born, and the after-birth followed in ten minutes, while I was giving an injection of Pituitrin.

The baby was swaddled Waddar style in rags and we improvized a binder and pad from an old saree. Two slaps on the buttocks and the [illegible] Waddar in the world let out a [illegible] which must have told the whole colony that he had come!

I had another experience with Waddars. I was cycling along one afternoon, and had occasion to stop near a culvert to pump up a deflated tyre of my cycle. Sitting on the culvert was a Waddar. He was holding onto his turban and groaning now and then as though in pain. I asked him what ailed him. He looked away down the road and appeared not to understand me or did not want to talk. Presently an old man came up to us, and I then noticed that they were of a party of Waddars who were carrying a steel almirah, which they had placed in the shade of a tree a little distance away. The old man smilingly told me that the man's wife was having a baby under the culvert on which we were standing. As he spoke the old man looked over the parapet, and with him I peeped over too. I saw a pair of dusty feet protruding from a hume pipe. "It will soon be over now," the old man said, and as he had foretold before my bike was ready the woman walked up the embankment with a baby at her breast.

I mentioned this hume pipe incident to a doctor friend who had recently returned from a Refresher Course in Medicine in Europe, and he told me about another sort of child birth which he had witnessed in Paris. At a famous hospital there a baroness gave birth to a baby in a luxury ward. The lady had been given exceptional care by eminent gynæcologists at Montreux and Geneva during her ante-natal period. There were two doctors in attendance and four nurses, and congratulatory bouquets of expensive flowers lined both sides of the carpet in the corridor from her ward to the grand staircase. The baby died in an incubator 6 hours after birth!

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Men Who Proved the Bible True—No. 4.

NEW LIGHT ON THE PATRIARCHAL AGE

W. L. EMMERSON

IN THE Bible account of Abraham's journey from Ur of the Chaldees to Canaan and the subsequent story of Israel in Egypt and Palestine, there are many references to contemporary nations and civilizations in Syria, Transjordan, and Palestine which have been the object of doubt and even ridicule by the Bible critics of earlier days.

Their successors of today are much more careful in their comments on Bible history, for archæology is steadily building up an historical and cultural background which is substantiating at every point of test the wonderful accuracy of the sacred Record.

Abraham's First Halt

When Abraham left Ur with his father Terah, he settled for a while at Haran, and there Terah died (Gen 11 31, 32). The Bible tells us nothing about the country in which Haran was situated nor did any other ancient histories know anything of it

The archæological curtain was lifted during the latter part of the nineteenth century by the discovery of a number of Assyrian inscriptions mentioning the city by name and indicating its situation in a northern province of the empire. It was then a centre of the worship of the moon-god, Sin, which explains why Terah, who worshipped Sin at Ur, persuaded Abraham to stop there.

In recent times archeology has taken us back before Babylonian Haran, or Harran, and before the Assyrian Harran to the Haran of Abraham's day, when we find that it belonged to the Mitannian kingdom. Tushratta, king of the Mitanni, we know from the Tel el Amarna tablets, was in regular correspondence with the pharaoh of Egypt in the days of the Exodus, begging gold from his "rich uncle" in return for the hand of one of the Mitannian princesses!

Thus the route of Abraham from southern Babylonia to Haran and then down into Palestine and Egypt is proved not to be the path of a lonely exile from his homeland, but along one of the great trade routes of the ancient world.

Thus the land and city of Abraham's temporary sojourn begins to take form and colour through the findings of the excavator's spade

Revelations of the Ras Shamra Tablets

After Terah's death, Abraham moved southward from Haran and began to make contact with the peoples who dwelt along the Mesopotamian seaboard Among them were the Canaanites (Gen 12: 6), the Amorites (Gen. 14:3), the Hittites (Gen 23·10), and others (Gen 15·19-21) To earlier Bible students these were mere names and by the critics most were regarded as mythical and legendary. Today, however, nearly every Bible reference can be checked against the findings of archæological research in this region.

In 1929 an ancient settlement was discovered at a place called Ras Shamra just north of Latakia, on the Syrian coast, and since that year thorough excavations have been conducted with spectacular success by the French archæologist, M. Claude Schaeffer.

He revealed that some time before Abraham came through the land it had been occupied by an Amorite-Canaanite people who gave it the name of Ugarit. The excavators did not find much remaining of the period when Abraham was passing through, and when Laban and Jacob lived in Syria, but about the period contemporary with the return of Israel from Egypt, there was found the great library of Ugarit in which were gathered vast quantities of Sumerian, Babylonian, and Canaanite documents, the last-mentioned written in a twenty-nine letter alphabetic script, the earliest true alphabetic language to be found outside the Bible

This proto-Phœnician script gave the final blow to the once widely-accepted critical dictum that Moses could not possibly have written so extensive a document as the five Bible books of the Pentateuch credited to him.

This theory was first called into question when the hieroglyphic and cuneiform scripts were shown to be far older than Moses' day. It was further undermined when scattered examples of letters akin to early Hebrew were found in Sinai and Southern Palestine dating from the thirteenth to the twentieth century B C And now the last crushing blow has been dealt by the Ras Shamra tablets which prove that alphabetic writing, similar to early Hebrew, was in common use at this early date.

The Corruption of Canaanite Religion

The Ras Shamra tablets, however, reveal a great deal more than the antiquity of writing Among the many religious texts deciphered by the French scholars, E Dhorme and C Virolleaud, appeared the names El and Elohim, which are used of God in the Bible In the Ras Shamra tablets, El is not the One God, but the supreme God who reigned over all the other gods and whose word none could change He is portrayed as the husband of Asherah and the father of Baal, both of which names

are prominent in the Bible as deities worshipped by the Canaanites

Here we can see the same sort of corruption of the worship of the one true God that we find when the Bible stories of the Creation and the Flood are compared with their Sumerian and Babylonian counterparts. When men departed from the worship of the true God they first pushed Him into the background and made other gods and goddesses to themselves, whom they claimed to be descendants of the supreme God. Ultimately, the true God was forgotten and the invented gods alone were worshipped

In the Ras Shamra tablets we see the pagan deities coming into prominence while the true God, El, is still to be seen vaguely in the background In the later Bible story, we find the Canaanite god Baal and his mother Asherah in active opposition to the true God, El Jehovah, of the Hebrews

Lot and "The Cities of the Plain"

When Lot parted from his uncle Abraham he went to dwell, the Bible tells us, in the cities of the plain Some little time later the Jordan Valley was invaded by Semitic bands from across the Syrian desert, and Lot and his family might have ended their lives in captivity but for the prompt action of Abraham (Gen. 13:14)

This whole story was once regarded by the Wellhausen school of critics as pure fiction Now, however, we recognize that it fits perfectly into the archaeological background provided by recent researches in Transjordan.

Chiefly as a result of the work of Dr W. F. Albright, Pere Mallon, and Dr Nelson Glueck, it has been fully established that at least as early as the third millennium B C the Jordan Valley and the highlands to the east were occupied by a large settled population, with numerous fortified cities, and that one of the great trade routes of the ancient world, named in Scripture "the king's high way" (Num. 20:17), ran right through this region from Babylonia in the north to Arabia and Egypt in the south

In the 1924 *Annual Volume of the American Schools of Oriental Research*, Dr. W. F. Albright says·

"The number of tells, great and small, and the enormous size of some of them, makes it plain that the

(Continued on p. 34.)

ONE THING IS NEEDFUL

GEORGIA LAUSTEN

"LORD, dost Thou not care that my sister hath left me to serve alone?" Thus Martha addressed Christ. Concerned about the comfort of her guests, she could not understand her sister's apparent indifference to the necessities of the travellers—water for their feet, clean garments, and food Hospitality was an art among the Hebrew women Mary was, no doubt, skilled in this art, but on this occasion she seemed disinterested in the favoured role Sitting at the feet of Jesus, she appeared oblivious of her duties

The Jewish rabbis believed that it was better to burn the words of the law than to deliver them to women. Perhaps Martha, therefore, could not understand why Jesus was talking thus to Mary Sometimes women dared to listen from a window, but never at the speaker's feet!

"Bid her therefore that she help me," the elder sister implored

The group was undoubtedly shocked at this breach of courtesy Martha, who prided herself in her ability as hostess, had failed to consider the wishes of her Guest above her own But she, too, was a disciple of Christ and must have been anxious to listen to His words. If Mary had assisted her, both might later have been at liberty to listen to the Master To Martha, Mary seemed selfish.

"Martha, Martha, thou art careful and troubled about many things," replied the gracious heavenly Guest.

Christ and His disciples had come to Bethany unannounced Preparation, therefore, had to be made after their arrival. Martha was worried about the dinner Her guest was the Son of God! She was anxious that the meal be correct in every detail. "She had a sister called Mary, which also sat at Jesus' feet, and heard His word" The word "also" implies that Mary did not spend the entire time at Christ's feet She had begun to help Martha with the preparation, but feeling that the dinner was of secondary importance, she seated herself at the feet of her Master.

Martha, realizing that Mary had stopped serving, became annoyed Mary seemed to forget that food cannot prepare itself! No doubt Martha feared that her dinner was going to be a failure. She was careful and troubled about many things—too many things. In her concern for the dinner Martha forgot her Guest.

"But one thing is needful," continued the Master, "and Mary hath chosen that good part, which shall not be taken away from her"

Jesus was not severe in His rebuke Kindly He pointed out that spiritual food is more important than the physical kind Mary was storing her mind with the precious truths falling from the Saviour's lips, words far more important to her than the unimportant details of serving Mary gave Christ her soul This gift was of infinitely more value than the work of her hands

The "one thing" needed by Martha was a deeper desire for knowledge concerning the future, the kingdom of God Martha's character was that of a busy, practical, irritable woman with a mistaken philosophy of life She needed less anxiety for the things which pass away and more concern for those things which endure for ever It was Christ's plan that she be made to realize that the gospel is for all—for women as well as for men.

The Saviour made the journey to Bethany on foot. He was weary and dusty, hungry and thirsty Both of the sisters were aware of Christ's needs, but they interpreted the needs differently. Mary, concerned with His spiritual gratification, gave to Jesus the atmosphere of hospitality; Martha, seeking to satisfy physical hunger and thirst, prepared its symbols. If Martha had sat all day at Christ's feet, there would have been no nourishment.

God is in need of energetic workers like Martha. First, however, they must sit at the feet of Jesus and let their lives be sanctified by His grace.

(Continued on p. 33.)

YOU AND THE BOOK

Lessons from the Sanctuary

ALMA L. TIBBS

THE tabernacle which was considered in our last study was a type of the heavenly sanctuary, and the ceremonies performed there were typical of ceremonies performed in heaven The tabernacle was surrounded by a court, and the services held in the courtyard were typical of services to be performed here on earth

1 Exodus 40.29—Near the door of the tabernacle stood the altar upon which the sin offering was burned

"And he put the altar of burnt offering by the door of the tabernacle of the tent of the congregation."

2 Leviticus 9·24—The offering was consumed by fire from heaven

"And there came a fire out from before the Lord, and consumed upon the altar the burnt offering"

3 Revelation 20.9—Sin will finally be destroyed on earth by fire from heaven

"And fire came down from God out of heaven, and devoured them"

4 Exodus 40·30—In the courtyard was the laver containing water

"And he set the laver between the tent of the congregation and the altar."

5 Exodus 30 18-20—If the priests failed to wash in water before entering the tabernacle, they would die

"Aaron and his sons shall wash their hands and feet thereat when they go into the tabernacle of the congregation, they shall wash with water, that they die not."

6 John 3·5—Birth by water is necessary

"Jesus answered, . Except a man be born of water, . he cannot enter into the kingdom of God."

7 Exodus 34:6, 7—Our merciful heavenly Father forgives iniquity and transgression

"The Lord God, merciful and gracious, . . . forgiving iniquity and transgression and sin."

8 Matthew 12:31—He will forgive all manner of sin.

"All manner of sin and blasphemy shall be forgiven unto men."

9 Hebrews 9.22—Forgiveness requires the shedding of blood

"Without shedding of blood is no remission"

10 Matthew 26·28—Jesus shed His blood for the remission of our sins

"For this is My blood, which is shed for many for the remission of sins."

Note: The death of the sinless Son of God was shown to man by the slaying of innocent animals

11 Leviticus 4 3—A priest who had sinned brought a bullock for a sin offering

"If the priest . do sin, then let him bring for his sin a young bullock"

12. Leviticus 4·13, 14 — Provision was made in case the entire congregation should sin

"And if the whole congregation . sin through ignorance, . then the congregation shall offer a young bullock for the sin"

13 Leviticus 4·22, 23—A ruler who sinned brought a kid as a sin offering.

"When a ruler hath sinned, . he shall bring his offering, a kid of the goats."

14 Leviticus 4 27, 28—Provision was made for anyone of the common people who sinned

"And if any one of the common people sin through ignorance, . . he shall bring his offering"

Note· Thus any member of the congregation from the greatest to the least could find forgiveness

15. Leviticus 4:29—The sinner placed his hand upon the head of his offering.

"And he shall lay his hand upon the head of the sin offering"

16. Numbers 5.6, 7—He confessed his sin.

"When a man or woman shall commit any sin that men commit, . . . then they shall confess their sin which they have done."

17. 1 John 1:9—If we confess, He will forgive.

"If we confess our sins, He is faithful and just to forgive us our sins."

18. Leviticus 4:29—Then he slew the animal.

"And he shall . . . slay the sin offering."

19 John 1:36—Jesus is the Lamb of God.

"And looking upon Jesus as He walked, he saith, Behold the Lamb of God!"

20 Isaiah 53:5—He was wounded and smitten for our sins.

"But He was wounded for our transgressions, He was bruised for our iniquities"

21 Leviticus 4·3, 28—Each sacrifice must be without blemish

"Then let him bring . . a young bullock without blemish."

22 Hebrews 9:14—The Lamb of God was without blemish

"How much more shall the blood of Christ, who . offered Himself without spot to God, purge your conscience"

23 Isaiah 53 6—Man's sins have been laid upon Him

"All we like sheep have gone astray; . . and the Lord hath laid on Him the iniquity of us all"

24 1 Peter 2 24—Jesus bore our sins when He went to the cross

"Who His own self bare our sins in His own body on the tree"

25 Hebrews 10:4—The blood of animals could not take away sins

"For it is not possible that the blood of bulls and of goats should take away sins"

26 John 1 9—The "Lamb of God" can remove all sin

"Behold the Lamb of God, which taketh away the sin of the world."

ONE THING IS NEEDFUL

(Continued from p 32.)

They must have the devotion of Mary, her understanding and appreciation of Christ.

It was necessary that Martha understand the vital truth that spiritual food is far more important than physical food This truth is even more essential today when the material aspects of life are over-topping the spiritual The modern definition of religion is service to men "Help your brother and your friend" is the ever-present theme of all But in our concern for God's work, we must not forget God. Our first duty is to serve our Master Then through Him we will better be able to serve others.

An atheist rescued an orphan boy from a burning building Having previously lost his wife and son, and

wanting to be of service to his community, he offered to adopt the boy. The city authorities were afraid to put the youngster in the care of a godless man However, when they looked at his scarred hands damaged by the fire, they knew that he deserved the boy, and permission was granted

The atheist, a good man soon won the orphan's love Often the boy would look at his father's hands and say, "You did that for me didn't you, Daddy?" The atheist was proud of the service he had done But he was not happy There was something fundamental lacking in his home

Several years later while visiting an art exposition, the boy saw a painting portraying doubting Thomas looking at Christ's hands The boy insisted that his father tell him the story

"You did just what Jesus did!" he exclaimed when the atheist had finished "Jesus saved Thomas, and you saved me"

Through the child's great love for the story and his frequent mention of the similarity between his father and Jesus, the atheist found his Saviour After inviting Christ to dwell in his heart and in his home, he and his son found genuine happiness

To the atheist caring for the orphan, and to Martha, busy with the meal, service meant activity But activity is not enough! "Doing" that is not rooted in Christ may be quite vigorous for a time, but its branches soon wither and die We must have receptive minds and souls, ever realizing that the everyday tasks are insignificant when compared to the heavenly truths

Thus we have two types of service for our Master—the material and the spiritual Neither is sufficient in itself. There must be a fusion of the two The greater emphasis lies, however, in the "one thing needful"; for if we choose this good part, it shall not be taken away from us

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NEW LIGHT ON THE PATRIARCHAL AGE

(Continued from p. 3..)

population of the Jordan Valley in the third millennium B. C., was not only greater than it is now but greater than it has ever been from that day to this, not excepting even the commercial centre of population around the Lake of Galilee in the days of our Lord."—*pages 12, 14*

In the 1926 volume he further asserts "that the most prosperous period of the history of this valley was in the Early Bronze Age (2500-2000 B C)"

It was without doubt the flourishing cities in the "garden of the Lord," (Gen 13:10) which tempted the Semitic kings from across the desert to send out a large raiding party

Furthermore, the route they followed, as described in the fourteenth chapter of Genesis exactly followed the line of the "king's high way"

"Formerly," says Dr Albright, "the writer considered this extraordinary line of march as being the best proof of the essentially legendary character of the narrative In 1929, however, he discovered a line of Early and Midd'e Bronze Age mounds (2500 1600 B C.), some of great size, running down along the eastern edge of Gilead between the desert and the forests of Gilead Moreover, the cities of Hauran (Bashan), with which the account of the campaign opens, Ashteroth and Karnaim were both occupied in this period as shown by archæological excavation of their sites"

Locating Sodom and Gomorrah

It was at one time believed that the cities of Sodom and Gomorrah lay to the south of the Dead Sea and had perhaps been covered by the waters at its shallow southern end Now we know how populous was the Jordan Valley immediately to the north of the Dead Sea, it seems much more likely that these two outstanding "cities of the plain" were actually in the plain of Moab opposite the Jericho ford This fits in with the latter part of the route of the raiding kings of Genesis fourteen, who, after coming down the east side of the Dead Sea, returned up the west side before reaching Sodom It is also in accord with the fact that Abraham and Lot first saw the cities from between Bethel and Ai, which would be understandable if they were north of the Dead Sea, but quite impossible if they lay far to the south. (Gen. 13:10.)

When Sarah died the Bible records that Abraham purchased the cave of Machpelah from Ephron the Hittite (Gen. 23:10) and there laid her remains to rest.

[illegible] number of references [illegible] at which the critics [illegible] askance, as they had found no evidence outside the Scriptures of any such people If they existed at all, they said, they must have been some very minor tribe of the Canaanite group.

In 1870, however, two American travellers came back from Hamath in Syria with drawings of some strangely inscribed stones Further independent investigations by William Wright, a missionary in Damascus, and Professor A H. Sayce of Oxford University, connected these inscriptions with other similar ones as far apart as Djerabis (Carchemish), in eastern Asia Minor, Boghas-keui, not far from Ankara, and Karabel, near Smyrna on the west coast Both came to the conclusion, which has since been abundantly substantiated, that these were remains of a Hittite Empire which at its zenith occupied the greater part of Asia Minor, northern Mesopotamia, and Syria.

"Five years ago," wrote Sayce in *Fresh Light from the Ancient Monuments*, "there was no one who suspected that a great empire had once existed in Western Asia and contended on equal terms with both Egypt and Assyria, the founders of which were the little-noticed Hittites of the Old Testament."—*page 92*

Much more could be said of the way in which archæology has substantiated and illuminated the story of the patriarchs, but space will not permit We must, therefore, conclude with a remarkably comprehensive statement of W. F Albright whose views on Genesis have been completely revolutionized by his personal studies in Syria and Transjordan:

"Eminent names among scholars can be cited for regarding every item in Genesis 11-50 as reflecting late invention, or at least retrojection of events and conditions under the Monarchy into the remote past, about which nothing was thought to have been really known to the writers of later days. The archæological discoveries of the past generation have changed all this. Aside from a few die-hards among older scholars, there is scarcely a single biblical historian who has not been impressed by the rapid accumulation of data supporting the substantial historicity of patriarchal tradition."—*The Biblical Period*, page 3.

Helen Keller Brings Light to the Blind

Helen Keller, the deaf and blind leader and educator, who has been touring our land in recent days Miss Keller, although deprived of sight, hearing and the ability to speak by a severe illness in childhood, attained a position of leadership in U S educational activities On behalf of the blind, Miss Keller has toured and lectured in many countries and has received many awards for her efforts Her books, "The Story of My Life," "The World I Live In," "Out of the Dark," and "Let Us Have Faith," reveal the results of modern methods employed in the United States of educating handicapped persons Her Mastery of Speech has been called the greatest individual achievement in the history of education She spends several hours each day at her typewriter Having memorized the keyboard, she types out letters, manuscripts, and other work accurately and rapidly

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May 1955

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Contents

May 1955

L. J. LARSON, M.A., B.Sc., Editor

DUNBAR SMITH, M.D., D.N.B., D.T.M. & H. (LOND.) ASSOCIATE EDITOR

J. B. OLIVER, M.D., D.T.M. ASSOCIATE EDITOR

FEATURE ARTICLES

OUR COVER

The next time you have a sore throat be glad you are not a giraffe!

S. G. Jayapalan

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Minute Meditations

THROUGH TROUBLED SEAS

D. A. Delafield

A FRIEND wrote me recently about his troubles. "I'm not going to be able to retire next January as I expected," he declared. "My last surgery did me no good, and I face surgery again. My wife has had two bad falls within the past two months, and is now confined to the hospital with a skull fracture and concussion."

My friend continued painfully, "I sometimes wonder whether my middle name should not have been Trouble instead of Trumbull. But I am happy in the promise that God will provide help for all my trials."

"Man is born unto trouble," said Job. But we must not permit troubles to overwhelm us. Let us, as Shakespeare said, "take arms against a sea of troubles." The word "trouble" is akin to the word "turbid." Anything is turbid when its clearness is disturbed by the stirring up of sediment. Life's sea may be perfectly clear until the storm of painful circumstances muddies up the water about us. Then we sail in turbid seas.

"Trouble and perplexity drive us to prayer. Prayer drives away trouble and perplexity." How many of us would think of God at all if it were not for the storms that rise on the sea of life? We may be thankful then for the troubles and annoyances.

There is a science to sailing through storms. Rough sailing makes good sailors. The sailor must know his chart and compass. He must know how to handle his boat. And there is a science to life. "The true way to soften one's troubles is to solace those of others." Helping to solve the problems of unfortunate people

(Continued on p. 5)

The Editor Says

MORE and more frequently, during the past two decades, the doctors have been telling us of the dangers to health inherent in constant worry and hurry. They warn that "constant hurry and excessive worry" are likely to overtax the emergency mechanisms of our bodies and thus prepare the way for disease of all kinds.

A research worker in Montreal, Canada, Dr. Hans Selye, is of the opinion that serious ailments such as asthma and heart disease are invariably associated with chemical imbalance in the body caused by stress.' *The Reader's Digest*, January 1955.

He contends that this "chemical imbalance" is caused by a "breakdown of the hormonal adaptation mechanism," and that it "appears to be a most common ultimate cause of death." He maintains that this imbalance occurs in nearly all cases of disease.

This is, we think, an interesting point of view. If Dr. Selye's theory is proved to be correct, stress, which lies behind all hurry and worry, will be labelled and condemned by medical science as a "killer—perhaps the greatest of all killers." Then the doctors will be much more emphatic than they are today that nervous, high-strung persons must either learn to "take it easy," or suffer the consequences.

The author of the *Reader's Digest* article expressed the hope that "as this realization grows, the businessman can find relaxing hobbies which will help him to slow down. The housewife can learn that it might be much more important to take a nap than to launder the guest room curtains. We can all master any lesson once we know that our lives are at stake."

The author suggests that this programme of relaxation, combined with adequate hormonal therapy to correct the chemical imbalance in the body, could lengthen our life-span to one hundred years or more and thus bring in a new day of health and longevity for mankind.

There are many lessons to be learned from the "*Digest*" article. Most of us need to slow down a bit and take life in our stride. You see, most of us are travelling too fast. Not only are we travelling too fast, we are travelling without a true sense of direction. Suppose, however, that we should "take it easy" and live to the grand old age of one hundred years. Then what? Will we eventually fall prey to disease? Certainly! Why? Because of stress? No. As one has said, "the final toll of disease and death is the long-range fruitage of sin *in man himself*. 'When lust hath conceived, it bringeth forth sin: and sin, when it is finished, bringeth forth death.'" (James 1:15.)

Billy Graham, world evangelist, said recently, "The problem of the world is not the hydrogen bomb, nor even communism. *The problem is depraved human nature.* There is no difference in the nature of the savage walking a jungle trail with a spear in his hand and an educated, cultured American flying a bomber overhead."—*Quote,* December 26, 1954, page 1. It is true that stress is rightly to be blamed for many diseases. Scientific medicine is rightly credited with many cures. But this does not solve the problem of man's depravity and inevitable doom.

We contend that only the forgiving grace of the Saviour can remove the cause of stress and death, which is, fundamentally, sin.

Another present day writer has said, "Disease is always in direct relationship to sin. Stress and such things as guilt, frustration, and emotional instability may be blamed for the great killing diseases, but the underlying cause is found in the sinful nature of man himself and the sure and final cure is found in the gospel of the Saviour." We believe that in ninety per cent of modern sickness, a knowledge of a *sin-pardoning* Saviour would make the patients better, both mentally and physically.

—L. J. L.

NOW POLIO VACCINE!!

AS WE go to press word reaches us of another victory in mankind's battle against disease. On April 12 it was announced in Ann Arbor, Michigan, that the Salk anti-polio vaccine was 80 to 90 per cent effective in the last spring's mass test on 1,800,000 children. The meeting at which this electrifying announcement was made was attended by over five hundred scientists and physicians. Doctor Thomas Francis, Jr., Director of the Poliomyelitis Vaccine Evaluation Centre, announced to an anxious world that the vaccine developed by Dr. Jones E. Salk of the University of Pittsburg is proving its effectiveness in preventing paralytic polio.

His report said in part, "There can be no doubt now that children can be inoculated successfully against polio There can be no doubt that humanity can pull itself up by its own boot straps and protect its children from the insidious invasion of the ultra-microscopic disease"

Dr Salk states that only two inoculations of this vaccine would be needed to give the majority of children immunity during the 1955 polio season and that the third or booster shot should not be given until at least seven months after the second inoculation

We hope to pass on a more complete report of this new development in science to our readers in an early issue

—L J L

Through Troubled Seas

(Continued from p 3)

will allow time for our own problems to solve themselves. Remember, many of the things we believe to be real troubles are only imaginary. "There are people who are always anticipating trouble, and in this way they manage to enjoy many sorrows that never really happen."

In replying to my troubled friend I said, "Hold on to the arm of Omnipotence, and you will be safe." Yes, hold on; don't jump overboard. Let God steer your little ship through the turbid waters. You'll reach port at last. No matter how fierce the storm, you'll be able to drop anchor safely

When we receive our eternal inheritance we will look back and say, "If I could have seen the end from the beginning, I would not have chosen to be led in any other way" Paul's words have deep meaning: "All things work together for good to them that love God, to them who are the called according to His purpose."

WHAT'S IN THE NEWS?

Compulsory military service in Russia starts when a boy is 16 years old, reports the New York "Times" But two hours' training a week is given youngsters at 12

* * * *

The venom of the black widow spider is 15 times more potent than that of the prairie rattlesnake, says 'The Naturalist,' but very few people die of the black widow bite because of the small amount of venom

* * * *

Lima Peru, can be added to the cities that are attempting to reduce noise on their streets A new law recently adopted by the city council prohibits, among other things the use of horns by motor vehicles at any corner where there is a traffic signal or policeman on duty, the playing of radios, loud speakers, and musical instruments for propaganda purposes, the shouting or use of whistles, bells or horns by vendors, and the pealing of church bells between 8 p m and 8 a m Even industries and shops that cannot eliminate noise producing operations within three months will be asked to move outside the city limits One exception to the law is the news-boys, who may continue their hawking

* * * *

During 1953, scientists, after centuries of trying, finally succeeded in making sugar in the laboratory from simpler compounds Two Canadian chemists, Dr Raymond Lemieux and Dr George Huber threw away the age old proofs that it couldn't be done, and performed the feat, which has been likened to the climbing of Mount Everest

* * * *

Through a plan called Seeds for Democracy several organizations in America have sent 3 million packages of seeds to farmers in the Philippines The seeds produce cabbages egg plant, cauliflower, tomatoes, lettuce, peas, watermelons, and squash

* * * *

The Pacific tree frog may repeat his "kreck ek" as many as 30,000 times during a spring night

* * * *

To produce one ear of corn requires 50 gallons of water, according to "Outdoors Illustrated"

* * * *

When the fighting in Indo China was brought to a halt recently, it marked the first time in more than 20 years when most of the world was at peace

* * * *

Snake bites kill some 30,000 to 40 000 persons every year reports the World Health Organization Numerically, India leads the world in fatalities from the bite of venomous reptiles, but in proportion to population Burma has the highest mortality, averaging 15 4 deaths per 100,000 people Next to Asia, South America has the highest totals

* * * *

It used to be said that the human body was "re made" about every seven years, but scientists now are learning that this is not so By placing tracer elements in the body and then watching for their replacement by non radioactive elements, medical scientists have now learned that every year about 98 per cent of the basic material of the human body is replaced with new stuff To illustrate, Dr Paul C Aebersold, director of the Isotopes Division of the Atomic Energy Commission, said "Investigations with isotopes have demonstrated that the body is like a very fluid military regiment which may retain its size, form, and composition even though the individuals in it are continually changing, joining up, being transferred from post to post, promoted or demoted, acting as reserves, and finally departing after varying lengths of service"

Are You Among the Multitudes Who Are Digging Their Graves With Their Teeth?

EAT RIGHT AND STAY YOUNG

C. R. ANDERSON, M.D.

EVERY normal person likes to feel young and healthy and full of vitality Nobody really wants to shrivel up and die before his time Life is full of enjoyment for every one of us So why should we not enjoy it to the full? We can do so when we know the secret of staying young Yes, we can even push the calendar back a bit by learning to live well

How shall we do this? Everyone knows that we must have fresh air and plenty of exercise There is no question about that But there is one type of exercise that we would all be wise to avoid, and that is using our knife and fork too freely! This kind of exercise can do a lot of damage at any time of life, but it is particularly dangerous after we reach forty years of age Over-indulgence in food is one of the main causes of disease, especially in middle life Many a man is cut down by some serious illness just at the time of his greatest usefulness to the world and to his family Those illnesses often arise from the wrong choice of foods Even good food, when it is taken too liberally, may shorten a person's life. Wrong habits of eating will rob us of our youthful good looks and our vitality It is so foolish to kill ourselves with our own knives and forks!

By learning to live right, we can all retain our vitality If we have lost our youthful vigour we can win some of it back by a sensible programme of living We can also avoid many of the degenerative diseases that attack the heart, the blood vessels, and the nervous system Good living depends to a large extent upon our ability to choose the right kind of food Unfortunately many of us allow ourselves to become weakened and run down through lack of a really adequate diet Then because we are weak we contract such common diseases as colds, virus pneumonia, and influenza These in turn lower our vitality still more As we find ourselves growing weaker, we become tired and depressed We are living in misery If we trace these conditions back to their original cause, we will often find that the trouble is partly due to a wrong diet

On a recent train trip I observed a fat and flabby business man who came in and took his seat He was short of wind and rather unsteady on his feet He seemed to have no vitality at all Not long after he had sat down someone came through the train selling soft drinks and sweets The fat gentleman in question did not appear to be lacking in things to eat He certainly had no need of any extra calories In fact, he had great rolls of fat wrapped around his middle, and under his chin, and in a dozen other places, just like so many spare tyres! Yet he did not hesitate to help himself freely to what was offered And before he reached the end of his comparatively short journey he had two more extra "meals" No wonder he looked prematurely old and sick! He may have been a smart business man, but he had absolutely no sense when it came to eating That poor fellow was digging his grave with his own teeth!

Over-indulgence will make us all look old and worn-out long before our time That poor fat man's blood vessels were breaking down under the strain of over-eating They were losing their natural flexibility and becoming hard and brittle, and due to what is called arterio-sclerosis This disease does great damage to the vital areas of the body When it attacks the small blood vessels of the brain it causes strokes, resulting in paralysis Over-eating damages the heart It not only increases the work that the heart must do, but it interferes with the normal flow of blood through the coronary vessels This lack of an adequate blood supply may cause severe cramping of the muscles of the heart The patient may begin to feel sharp pains in the chest, especially on exertion These pains are due to an insufficient amount of blood flowing through the coronary vessels of the heart

Over-eating also leads to other serious conditions, such as high blood pressure and diabetes. Even cancer is more common in those who are obese. Surgical operations always carry a higher risks in those who are obese than in those of normal weight Diabetes is two and a half times more prevalent in people who are over-weight than in those of average weight. All these diseases tend to shorten a person's life

Over-eating can be dangerous for other reasons as well When we take in more food than we actually need, the excess calories are stored as fat Some of this may be packed away in large masses under the skin, where it tires us out because of all the extra weight we have to carry

around Any of us would be tired out if we had to carry a fifty-pound bag of cement around with us all day as well as trying to do our work! Such an unnecessary load puts a heavy strain on bones and joints and muscles Yet many people are doing this very thing They are wearing themselves out with excess fat They are shortening their lives at their own dinner tables And what is still worse, some of this excess fat often finds its way between the cells of such vital organs as the liver and the heart, where it impedes the work of the organ involved Thus it cuts down the efficiency of the whole body

Everywhere we find men and women who are tired out long before their normal time Many of them are looking for some doctor who can prescribe some magic medicine to patch up their vitamin-starved bodies and shrivelled-up systems Many of them are grossly over-weight, yet they are really suffering from a form of malnutrition They may look well fed, but actually many of them are starving for minerals and vitamins and proteins There is no magic medicine for such conditions What these people need is a balanced diet, a proper programme of living and plenty of rest

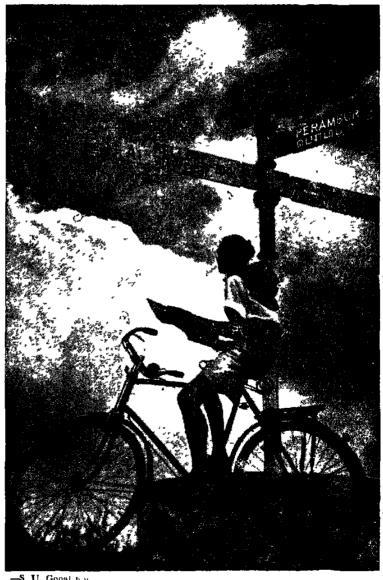
Several years ago a young research worker at a university was investigating the effects of certain diets on cattle Twenty-eight cows were given a diet from which some of the vital elements were missing These essentials were purposely removed so that the investigators could study the effect on the calves At the end of a year no less than thirteen of those twenty-eight cows had dropped dead in the field! They all looked fat and well, but they had suddenly died of heart failure due to poor nutrition When the rest of the cows were put back on a normal balanced diet, the investigators found that all lived out their normal span of life It was the balanced diet that made the difference

In the same way we human beings may help to overcome the early effects of degenerative diseases by changing over to a balanced, sensible diet But we can never build up a good physique or maintain a healthy body on sweets, pastry and coffee Nor can we claim to be in good health when we are carrying around fifty pounds of extra fat that we do not need Much of the fatigue from which so many people suffer is due to unnecessary weight The right diet will remove it

Believe it or not, it is often at the breakfast table that many of our troubles start Maybe we did not get up early enough, and so there is no time to eat a sensible breakfast Perhaps we have no inclination to eat because of family friction or business worries Perhaps we were eating and drinking things that we should not have touched the night before

So we start the day with little or nothing to eat Then, because we feel weak, we have to take a small meal in the middle of the morning This relieves our immediate feelings of weakness, but it spoils our appetite for the mid-day meal, so we

(Continued on p 29)

—S U Gopal Rao

Sign posts along the highways are highly valued Should we not similarly prize sign posts on the way of health?

Catch Influenza Early—Before It Catches You!

HOW TO TREAT THE FLU

EDNA F. PETERSON, M.D.

WE ARE truly living in a golden age. As we look back to the methods used in the healing art a century ago we can exclaim, "What hath God wrought!" One hundred years ago the average span of life was twenty-seven years, in 1900 it was forty-seven years, in 1950, sixty-eight years. Today there are four times as many persons over sixty-five years of age as there were a century ago.

The annoying disease influenza still remains unconquered. Although ordinarily not so death dealing as some diseases, it affects all ages and all classes of men, women, and children, male and female, rich and poor, in all climates. It causes more misery and more loss of time each year than any other malady.

Call it what you will—flu, grippe, or virus X—the symptoms are the same. Usually the patient can diagnose his own case, because of the characteristic picture. "Aching all over," the patient says, "from the roots of my hair to my finger tips." Cold chills chasing one another up and down the spine. Pain in the head, especially behind the eyes and in the sinuses. Stuffy nose, tight, vise-like pains in the chest. Dry, hot skin, rise in temperature, loss of appetite. Later, exasperating cough followed by weakness, extreme out of all proportion to the severity of the disease.

Influenza is a highly infectious virus disease readily transmitted by unguarded sneezing, kissing, coughing, expectorating, and poorly handled dishes, utensils, and food.

Repeated attacks of influenza in one year are possible, for immunity after an attack is short. This disease may occur in pandemic (world-wide) epidemic, and single-case scope.

The last great pandemic occurred in 1918 and 1919. World War I was raging. The influenza was in a very severe form, and was often complicated by a highly fatal form of pneumonia. This great pandemic snuffed out the lives of 400,000 persons in America. More lives were lost in it than during the five-year period of the war.

When you "took cold" you had sudden or prolonged chilling of a part of your body. For instance, you sat in a draft, with the cool air blowing on the back of your neck, or you suffered exposure with cold, wet feet, which brought a lowering of vital resistance. Into your nose and throat passed the micro-organisms of influenza.

What happened in your body?

1. Internal congestion of blood, chilly feeling of the skin, with goose flesh.

2. Accumulation of waste products in the body.

3. Invasion of various bacteria.

4. Rise in body temperature, because of nature's attempts to burn up the poisons.

How shall we treat influenza? During the influenza epidemic, aspirin was used. Later it was discarded, because of doing more harm than good. Aspirin may lower the temperature, but at the same time it destroys some of nature's best protectors—the white blood corpuscles. Experimental researchers have shown that aspirin lowers temperature by heavily dilating blood vessels in the skin. Alcohol works in the same way. Such a drug depresses the heart as well as the blood vessels, and seriously interferes with the healing process. It confuses nature's fine machinery and breaks down the constitution.

One of the most successful methods of treatment of influenza and pneumonia known to man is the simple method of applying wet hot packs to the chest and back—hydrotherapy (Kenny packs). In a hospital in Los Angeles this method of treatment was used during the influenza epidemic in 1918. Statistics showed that though most hospitals were losing up to 30 per cent of their patients, this particular hospital lost only 4 per cent. When they were forced to stop taking hopeless cases, they did not lose any of their patients!

Water comes nearer being the great panacea for the treatment of disease than any other remedy known to man. Among the Spartans of ancient times, cold bathing was made obligatory by law. The *Japanese Medical Journal* of 1881 stated that the cold bath had been in use more than eight hundred years. The emperors of Rome vied with each other in erecting magnificent baths. They were in use for many years, not only in treatment of disease, but also in maintenance of good health.

Water is popular because it is always available and because it adapts itself readily to the various needs and demands of man.

Hydrotherapy (water treatment) as a science dates back to about 1829 Vincenz Priessnitz, a farmer of Silesia, had been impressed by observing a simple incident in nature. He had seen a little fawn with a wounded leg step down into a running stream every day and stand in its cooling water. The pain was made easier, the congestion was relieved, the injury was healed

Some time later, Priessnitz met with a serious accident from a runaway team of horses He received many bruises and two broken ribs. The doctors gave him no hope of recovery But remembering the wild deer, he tried the same remedy on himself He covered the broken ribs and swollen bruises with cold cloths, also he drank freely of water In a short time he was completely cured

Although an unlearned peasant, he was so impressed by his water cure that he started "baths," and thus helped to organize our modern system of water treatments They worked miracles He opened his house to sufferers, and marked healing results followed So began this great system of healing with hydrotherapy

Nature has bountifully supplied certain areas in the United States with water, some of them having ever-flowing streams of hot and cold water gushing from the rocks of the mountainside.

One such natural health resort is Hot Springs, Arkansas, where there are forty-seven continuous flowing hot springs Also there are cold springs not far distant These waters are charged with twenty mineral substances, one of which is radium As a result of this gift of nature, statistics show that the span of life is five years longer in Hot Springs, Arkansas, than anywhere else in the United States

Tradition says that Indian tribes realized the healing virtue in these waters, and would often fight over their possession Finally they were made available to all tribes Fine modern baths are now available

More than 300,000 seekers of health come to this fountain of youth each year Those with lame backs, stiff joints, loss of appetite, or whatever else, file in, each looking for healing balm in the flowing waters

What is the action of water treatment?

The skin is the sounding board of the whole body, a marvellous structure of nerves and blood vessels It is capable of holding one seventh of the blood of the body The skin is reflexly connected with the organ that lies beneath it If we wish to treat the lungs, we must treat the skin immediately above the lungs Applying heat locally to the skin relieves the congestion of the organ below that area of skin

Managed correctly, water has the following effects, all without later harmful reactions

1 Water cleanses body surface (you "breathe" better through a clean skin)

2 Relieves tense nerves; is restful

3 Relieves pain effectively

4 Lowers body temperature

5 Relaxes muscle spasm (Kenny packs for polio)

6 Increases white corpuscles 200 to 300 per cent Markedly stimulates circulation

7 Relieves congestion in the internal organs, such as pneumonia in the lungs

When preparing to give hydrotherapy treatments, be sure that the patient has had a good elimination You may give an enema to make sure Have the patient drink freely of fresh tap water during the treatment, to hasten perspiration.

Remove the patient's clothing, tuck him in between light-weight blankets, and keep him well covered. This is to assist perspiring and also to keep the bed from getting damp The temperature of the room must be comfortably warm, so that he will have no chilly sensation after the treatment is over Patient must be kept covered at all times, with only one part exposed at a time Work promptly so *that the treatment does not* consume too much time Apply a cold cloth to the patient's head, if desired It must be wrung out so there is no dripping

By the word *fomentation* we mean local heat by means of steaming hot flannel packs or an electric pad manufactured for this express purpose No ordinary electric pad is to be used

An old part-wool blanket is best, because wool retains the heat longer Cut the single blanket into four squares, each about one square yard Reserve two for dry use If you have no blankets, you may use Turkish towels

Have ready an open kettle or dishpan of boiling water Fold the dry cloth in half lengthwise Keeping the ends dry, dip it down into the boiling water Twist it to wring out excess water Fold it into dry cloth, which lies flat on the table *Fold over into half the original* size to fit the wet cloth Quickly roll it up to keep it hot, take it to the patient, and place it on the chest It will feel hot, of course, the heat is what does good But don't burn your patient Rub your hand under the pack or lift it for a moment, until he is used to it Quickly drying the skin under the pack also keeps it from feeling too

(Continued on p. 28.)

YOUR CHILD AND HIS SCHOOL

BEULAH FRANCE, R.N

Of course you want your child to be successful in elementary school and after-life Your attitude helps.

HAVE you a child soon to enter elementary school who did not attend nursery school? How do you plan to prepare him for his new life? He will be greatly influenced by your attitude, by what he hears you say, and by the expressions that flit across your face

Do you suddenly grab him and kiss him? With emotion in your voice do you say, "How will Mummie get along without her baby?"

For his sake, try a different tack Let him be your 'little man,' proud of his age and of his dignity Keep in mind that you're laying the foundation for his future failure or success in life

Have you taught your child enough independence? If not, begin to clip your apron strings Encourage self-help Praise him for doing things strictly on his own That's the way to prepare him for school He will be better liked by the teacher and his classmates

Don't shun facts, face them What about toilet habits? Is your boy socially acceptable yet in a really dependable way? If not, get busy and make cleanliness appealing Tell the child that in school all the others will take care of themselves, or if they do not he can That will make him feel capable

Does he know how to wash his face and hands, and that it's necessary to wash his hands before meals and after bathroom visits? If he doesn't, teach him But make it fun You can do it Did you ever stop to think of how many times we mothers make tasks out of children's daily duties, when we could fill them with drama, drama the children would love?

Good eating habits are important If your child dawdles, he'll be late getting off to school Set a little time clock, and let him know it ticks away the minutes Stimulate his interest in finishing his cereal before he hears the clock's bell ring That's much better than finding fault with his delays, and it won't take away his appetite

Does he go to bed on time without any fuss? Most likely not That's asking a lot But make him feel the thrill that awaits him in the morning Don t let him get so excited he can't go to sleep, yet don t let bedtime be dread-time And it won't be if you make it interesting

Sleep, food, good health habits, willingness to listen and obey, plus a certain amount of independence —all these go to make up the right preparation for entrance of your child into school

Now, what about the school itself? Since your child has n attended kindergarten nor been nursery school, this is a most im portant question

This question recently had to b faced by Mrs James McMurr She had just moved to the cit Her six-year-old twins had nev been to school Used to roamir the wide open spaces of the rur district where they were born, the were inclined to be afraid of ever thing in their new surroundings

So, secretly, was their mothe "But I had to appear big an brave," she explained "I reali fear is contagious I believe con fidence can be catching too, al anticipation"

Isn't that a refreshing attitu to take!

Very sensibly, Mrs McMurr selected a good child's doctor H was highly recommended b neighbourhood mothers, and h proved to be all that they promise

She took the twins to him Th were timid at first, so shy the mother really felt embarrasse But he, used to children, unde stood, and in a short time th were utterly relaxed and feeli quite at home

As the two adults chatted t two children played The doct watched them "Mrs McMurr he said, "you have a fine pair healthy boys They must adju to their new life They will g used to children in school Th can't always be shielded an sheltered. Let them learn from t

start how to get along with all kinds of youngsters."

This doctor believes it is best to start early laying the firm foundation for life that children will be able to build on He does not believe it wise to start them out as isolationists

There's a lot of common sense in that viewpoint We all know boys and girls who are growing up believing that only certain select groups are "good enough" for them Then comes the jolt Someday they are bound to be thrown into a situation they have never been prepared for No wonder there is bewilderment and frustration among young folks

Become acquainted yourself with the school you choose for your child Visit it before your boy enters, learn as much about it as you can This background you build up will help you to help your child You will understand what he's talking about

If there is anything you don't understand, make it your business to find out Meet his teacher, and be agreeable to her Far too often we parents approach teachers with chips on both our shoulders, then we wonder why the teacher "freezes up" We really set the pace, generally the first time we make contact

Be disarmingly frank Instead of trying to make her believe you're the mother of an angel, admit freely that your youngster has faults Tell her you want to "ready him" to face the world, that you know she can help you and that you want to help her too Ask her how you best can do this

Together you can map out a tentative programme for year-long co-operation You may be one of the very few mothers who will think to do this If so, what an impression your child will make on her! "He's the son of that thoughtful and considerate mother" will be the way she'll think of him

Is there something special you should teach him before the school bell rings? Has the teacher any suggestions for emotional adjustment? With her wide experience, surely she knows where most mothers fail You want to avoid failure so far as possible

Probably she has ideas about ways you can help your school child at home It will be important *that you two expect the same* things If the teacher asks your little son or daughter to do something one way, then at home you insist on a different method, naturally the child will be bewildered

Watch your first-year student carefully during the early school days If you think he feels a conflict, talk it over with the teacher Never, never take sides with your child against her Get the facts straight before you pass judgment And keep an open mind Just because he is yours need not mean "perfection"

Have you met the school nurse? And made her feel at ease? It won't hurt, you know, to ask her advice now and then, and it could sometimes do a great deal of good If your child is reported as being mischievous, consider the possibility of some slight difficulty with his sight or hearing It is frequently found that an inattentive youngster is really missing what is going on, and his interest wanders Only a dull, stupid little boy or girl would willingly sit still in school if not able to participate in the programme

First impressions are important Take your child to school cheerfully on the opening day It may not be the actual opening of the school, but it will be opening day for him His eyes, his ears, his nerves, all his emotions, will be opened to new sensitivities Don't take for granted his ready acceptance Remember, he is only a small child in a big, strange world

If he's timid, don't rebuke him On the other hand, don't let him

be a sissy As the doctor pointed *out to Mrs McMurry, children* can't be shielded and sheltered They have to learn from the start how to get along with all kinds of youngsters

But some make adjustments more slowly than others This is important, expecially for children who did not go to nursery school You must remember that Any attempt to push your child through the classroom door on the first day, then leave it up to the teacher to keep him there, would be nothing less than cruel

Because you become friends with his teacher before his first school day she will probably be willing to let you remain in the classroom for a while You must not be impatient with your little son

You have tried to prepare him emotionally But the strangeness of new surroundings make it easy for a child to forget It may take several days for a successful absorption by his classmates of your youngster

But with the help of the doctor who examined your child and made sure of physical fitness, plus the help the teacher gave you, you will be able to cope with the situation satisfactorily

Baby is a SHOW-OFF

MARIANA PRIETO

Your baby's wish to make a good impression is only normal But don't let his natural desire be his un-doing.

Photo by N. Ramakrishna

Even very young children know when they are being watched.

MANY fond parents would become angry if you told them that their precious offspring was a little extrovert and egotist, but psychologists agree that this is true of most children As a mother who tries to be unbiased in her opinions, I admit that it is the case But we needn't be depressed about it Since we love our little exhibitionists, we can manage them if we start young enough and don't let them get the upper hand, figuratively speaking, of course

Bedtime might be a particularly extrovertish time for baby If he can be the centre of attention, he will soon find it out And he loves it Not wishing to lose his importance, he may stage a tantrum or hysterics He should therefore be placed in bed calmly, with no wild gymnastics or calling in friends or relatives to see baby in bed No comments on how cute he is when he takes his nightly bottle, because baby will know it as they all stand around the crib smiling and cooing at him Then when you say good-night, leave him, and turn out the light, he won't like it. He will probably start to cry Why? Because he wants his audience back

Crying will attract the family's attention back to him Even at the age of just a few weeks, baby can learn the magic of tears.

(Continued on p. 28.)

SPARKLING DRINK ends 'hot-weather stomach upsets'

IN the hot weather, your stomach is easily upset Your mouth feels unpleasant and you tend to become sluggish and lazy. Eno settles the stomach and tones up the system, keeping it active and healthy.

Eno is a mild, efficient antacid It gives quick, positive relief from acid indigestion, 'heartburn' and gas in the stomach In just eight seconds it makes you feel better – not just your stomach but your mouth, too!

If you overeat — or eat something that doesn't 'agree' — Eno's special *buffering action* helps to put things right. If you need a mild laxative, take a slightly larger dose on an empty stomach. Always keep Eno's 'Fruit Salt' handy.

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ENO'S "Fruit Salt"

Large bottle Rs. 3/12
Small bottle Rs. 2/6
Exclusive of Local Taxes

The words 'ENO' and 'FRUIT SALT' are registered Trade Marks

FINGERNAIL FACTS

ROBERT P. LITTLE, M.D.

Did you ever give fingernails a second thought? They are a very interesting part of your anatomy!

DID you know that your fingernails, like claws, hoofs, and hair, are merely altered skin? The horns of most animals are an outgrowth of bone. But the horn of the rhinoceros, like your nails, is only altered skin, a sharpened callus, so to speak, on which this pachyderm impales his enemies, Perhaps you will be more likely to believe this when you remember how hard a humble corn can be

You should never forget that nails are a part of your body and very much alive at the root and in the deeper layers You are reminded of this when a splinter enters the quick. Now it follows that if your nails are a part of you, they share in your diseases For example, when your hair is lost because of that strange form of baldness called alopecia areata, you may also shed your nails

Are your fingernails pitted? If so, you should consult your physician, for pitted nails are sometimes a symptom of psoriasis Indeed, pitted nails may long precede the other symptoms of this annoying but generally harmless disease

Occasionally children are born without nails, just as they are sometimes born without hair When the nails are rudimentary, hair and teeth may also be defective But don't confuse such rudimentary nails with those of the nail biter, even though this habit may destroy the nails down to the half-moon

Nails shortened by biting may re-grow when the habit is stopped or they may remain permanently shortened Nail biting is a nervous trouble, and you should consult your psychiatrist for relief from it

Sometimes the root of your nail is injured by blows or by catching your finger in your car door The nail may then fall It re-grows after a lapse of time, but if the root has been permanently damaged your nail will be deformed

Sometimes injury is followed by a thickened nail resembling a ram's horn The trouble is more common on the toe-nails When the nail is injured by manicuring or in other ways, ridges or white spots may appear on your nails and remain for some time

The so-called Beau's lines are transverse furrows caused by some systemic disease serious enough to arrest nail growth When your vital force returns, your nails start to re-grow, but a furrow marks the change Since your fingernails grow at the rate of one millimeter a week you can calculate the time of the illness by measuring the dis-

stance of the Beau's lines from the root Beau's lines have been seen after acute arsenic poisoning, typhoid fever, influenza, measles, malaria, and many other diseases

Sometimes the whole nail overgrows and becomes thick and hornlike Such nails may be associated with any chronic skin disease

When the circulation in your arms and legs is interfered with or weakened, your fingernails may become curved around the ends, called clubbing, This symptom was mentioned by Hippocrates as seen in tuberculosis patients, and today such nails are called Hippocratic

When fingernails are depressed in the centre they are called spoon nails This trouble is sometimes seen with anæmia in middle-aged women, and is associated with sore lips and difficulty in swallowing But there are other causes for spoon nails, for example, eczema, nervous prostration and nail biting

Sometimes the nails separate into layers This condition is frequently seen in typists It is favoured by long nails and certain nail enamels that produce chemical changes in the nails

Sometimes the nails may have white spots perhaps the whole nail may become white like milk This happens because the layers of the nail are not properly cemented The condition occurs in various nervous, systemic, and circulatory disorders

Loosened nails and complete shedding of the nails may be symptoms of systemic disease when not caused by injury or inflammation

The root of the nail may become inflamed When the infection runs around the base, as it generally does, the trouble is popularly called runaround A chronic form of runaround is frequently seen in d shwashers and others whose hands are immersed in water for long periods It is caused by a form of fungus

To keep your hands and nails beautiful, *care for them sensibly* Keep your nails trimmed Long nails are easily broken In typing and piano playing shock may be transmitted to the root, where it may interfere with normal growth Dirt accumulates beneath long nails and it may contaminate the food you prepare Nurses do not allow their nails to grow long

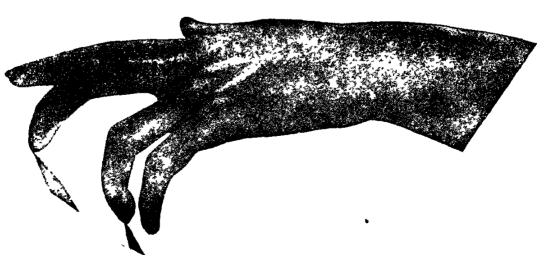
Most nail lacquers and polishes are *relatively harmless*, but some may sensitize your skin and injure your nails Dermatolog sts frequently find eczema of the face and hands caused by nail polish

When manicuring your nails, do not cut the cuticle at the base, but gently push it back Too vigorous manicuring can injure the matrix and cause white spots, ridges, or even infection Remove hang-nails with sterile scissors A splinter under your nail should be removed aseptically by your physician

Brittle nails may exist from birth, but the most common causes are alkaline soaps and certain nail polishes and polish removers containing acetone Acetone removes the oils and wax But brittle nails are also found in the strange skin malady called Darier's disease and in vitamin A deficiency

Hard, firm nails protect the finger ends from injury through shocks or blows But they must not be too brittle Ordinarily the skin oils keep them flexible to the proper degree.

The best treatment for brittle nails is to avoid strong soaps and acetone Apply cold cream, lanolin, or other fat, or vaseline A little applied to the backs of your hands and spread by rubbing them together protects the palms from getting greasy Soaking the nails in warm oil is also recommended

Diseased nails are best treated by your doctor Indeed, if you want to beautify your hands, you will regularly consult your skin specialist Beautiful hands and nails are a sign of good health, maintained by hygienic living

PROTEINS—
The Centre of Life

U. D. REGISTER

IN 1839 the Dutch chemist, Mulder, isolated nitrogenous compound that he called "protein," a Greek word meaning "to hold pre-eminence" or "take first place" In his studies he concluded enthusiastically that proteins were "unquestionably the most important of all known substances in the organic kingdom" Although this statement overemphasizes proteins, the importance of these compounds is seen in the functions they perform in the body

Proteins make up about 75 per cent of the solid materials of soft body tissues They are essential constituents of every living cell The body is active in replacing tissues that are constantly being broken down, and amino acids (building blocks for proteins) are necessary for the making of new cells The amino acids must be supplied from other tissue protein or from the protein in our diet This continual building programme creates the need for proteins, without which the body would rapidly waste away.

Besides being essential for growth and repair, proteins have many specialized functions in regulating body processes Let us note a few of these Many of the *hormones* are protein, as well as all the *enzymes*, which are essential in digestion and utilization of food The *antibodies*, the body's defence against disease, are protein in nature The blood proteins aid in *regulating the acid-base balance of the body* and act as *carriers of oxygen and other nutrients* to every cell

Proteins contain about twenty-one different amino acids Some of these amino acids, or building blocks, cannot be synthesized, that is, manufactured, in the body, and they are said to be essential They must be obtained from the diet Amino acids that can be formed from other amino acids are, dietarily speaking, said to be non-essential However, to build body proteins all the so-called essential and non-essential amino acids must be present

The structure of proteins is so complex that little is known about why, for example, one protein acts as an enzyme to digest food, whereas another acts as a hormone to regulate the use of that food One protein acts as an antibody to protect against disease, and yet another forms a deadly virus Our individuality, hereditary traits, and characteristics are determined by the type of proteins that make up the genes in the body How these amino acids combine to form proteins having so many different specific functions is a great mystery to chemists One investigator said that proteins are the centre of life If we could understand their action, we might understand life itself God has not yet chosen to reveal this great mystery

The laws governing the continual, rapid, and orderly formation of the numerous complex proteins in the body are one of the best evidences to the devout biochemist of God's sustaining control in life processes Suppose the body started synthesizing viruses that kill instead of antibodies that protect?

Because of the great importance of proteins in life processes, much discussion and research concerning the requirement and the value of different food proteins in human nutrition have been done On the basis of nutrition surveys made in Germany about 1881 Voit found the people eating about 118 grams of protein per day, and set the requirement of protein at this level, even though he maintained a subject in good health and vigour for three years on a diet of fruit, oil, and graham or pumpernickel bread This diet provided a daily intake of only 54 grams (about 2 ounces), a level below half of the recommended Voit standard The later work of Chittenden and Hirschfeld showed by long-term

experiments that human subjects did well on 45 to 53 grams of protein per day, even under severe exercise Many studies today have shown that 50 to 60 grams of protein per day is adequate for healthy adult subjects Maintenance levels of 28 grams per day on a mixed diet and 32 grams on an all-vegetable diet have been reported (Sahyun, *Proteins and Amino Acids in Nutrition,* p 74)

Dr H H Mitchell, outstanding for his contributions to protein evaluation, has set the daily requirement of protein for a 70 kilogram (154 lb) man at 42 grams if the protein is milk protein, 74 grams of white-flour protein, 54 grams of an all-vegetable protein, or 50 grams of mixed animal and vegetable proteins Because of the differences in the ability of individuals to digest food, as well as other considerations, the National Research Council has recommended one gram of protein per kilogram of body weight (2 2 lb) per day, for the average adult man about 70 grams and for the average adult woman, 60 grams These values may represent 30 to 50 per cent more than actual requirement However, for optimum nutrition a degree of safety above minimum requirements consistent with good health is the wisest policy

Although early studies seemed to indicate that certain vegetable proteins were inferior in quality to animal proteins, more recent studies have indicated that there is about an equal requirement of protein by weight, whether the protein is from a mixture of vegetable proteins or from an animal and vegetable diet One protein supplements another, and when a wide variety of protein food is eaten, all the amino acids are obtained even if the diet is of purely vegetable origin

In general, legumes and vegetables are low in sulphur amino acids, and cereal grains are low

Proteins are essential for body growth and repair and have many other specialized functions.

in lysine, an amino acid Cereal proteins will supplement legumes and vegetables Since legumes and vegetables are generally good sources of lysine, they in turn will supplement cereal proteins Simply speaking, a combination of proteins from the two sources would be better than either one alone Very recent studies in the College of Medical Evangelists laboratory have shown that animals on a combination lentil-gluten diet grew over five times as fast as those on either a lentil or a wheat gluten diet alone.

Wheat gluten products are popular protein dishes in many families This protein is low in lysine, and cannot be considered a complete protein Gluten contains liberal amounts of other amino acids and thus would make a contribution to the diet Gluten and foods rich in lysine, when used together, seem to support nutritional states in infants comparable to those resulting from an evaporated-milk diet (*Journal of Nutrition,* 38 222, May-Aug , 1949)

For gluten to be a good entree it must be combined with proteins

high in lysine, such as soybeans, garbanzos, lentils, beans or peas, milk, eggs, yeast, or wheat germ Gluten is also practically devoid of B vitamins, which one expects to obtain in protein foods Supplements of yeast or wheat germ provide liberal amounts of B vitamins Use gluten for texture, and add high-quality proteins and B vitamins to it If a glass of milk is taken, it has a marked supplementary action on gluten products Results in the laboratory of the College of Medical Evangelists have shown that animals on protein foods containing gluten as the chief source of protein grow very poorly and lose their hair Supplements of soyabeans or garbanzos to these diets have increased growth in laboratory animals as much as ten times, and normal hair growth is resumed

Egg protein stands as the epitome of proteins, with milk protein ranking second Because of their high quality, these proteins have an excellent supplementary effect even when eaten in small amounts If egg is rated at 100 and milk at 90, then there are a number of proteins that would rate between 70 and 80 meats, soybeans, garbanzos, cashews, wheat germ, yeast, vegetables, potatoes, and a mixture of grains (rice, wheat, corn, and oats) Whole wheat has a value of 67, white flour 52, and

(Continued on p 24)

Your Health Depends on You!

S B WHITEHEAD, D.Sc.

IN THESE days of national health service there is a growing tendency for many people to consider their health the chief concern of the doctors, and as something outside of themselves and their responsibilities A writer in a leading newspaper recently recorded his observation that some people go so far as to have a weekly "doctor's night" when they visit the surgery to have him check-up on their aches and pains

The attitude is growing that keeping the people well is a matter for the doctors, and less and less the responsibility of the individual Yet the truth is that no one can keep well or know the full joy of perfect well-being without personal effort The idea that you can live as you like, taking whatever vicarious enjoyment you can get from indulging your appetites and tastes, and turn to the doctor to remedy the consequences and ill effects is pernicious, false, and even immoral Primarily and ultimately, your health depends on you When you do fall into the doctor's hands, his ability to restore your well-being depends upon the health within you

Individual Nature of Illness

In recent years, it has become increasingly recognized in medical circles that ill-health and disease are personal and individual You do not suffer so much from a specific and well-defined disease when ill, as you do from a disorder with symptoms, characteristics, and causes reflective of your own individual nature and make-up Consequently, it is the patient as a whole, rather than the disease that requires attention

But if this is true of a person in sickness, it is just as true of a person in health Your health is your personal state of well-being, and none is more able to maintain it than you yourself To keep well brings its own rewards in your capacity to enjoy life, do your work, and make your individual contribution to human welfare And surely it is only right that one should keep as fit as possible, if only to allow medical and scientific resources to be concentrated on those most in need

It is strange to find that while much time, thought, and effort are devoted to keeping machines such as cars in good running order, little or no consideration is given to maintaining the human machine at its peak efficiency Yet the individual is a rarity in this country who has not the means of good health readily available and at hand Heredity and environment may place some limitations upon the degree of health you can enjoy, but within these limitations almost everyone can be healthier, given the will to be

Resources of Good Health

The resources of good health are the same for everyone—air, food and drink, exercise, rest, emotional balance, and spiritual faith Our state of health very largely depends upon the use we make of these resources, and it is the active positive exploitation of them that counts

Breathing It is unfortunate that air is taken for granted Nevertheless, the way you breathe has a most powerful influence, physically and mentally Your breath is the most vital thing you have It determines your circulation, your heart-beat, your speed of metabolism, and your tranquillity Most people breathe far too shallowly and rapidly, only using part of their lung capacity Their blood is only partially oxygenated, and the most deadening waste of the body carbon dioxide gas, is imperfectly expelled

If you have never thought about it before, try giving fifteen minutes a day in three minute periods to re-educating your respiration You can do it sitting, standing, or lying down Simply concentrate on fuller and more rhythmic breathing with

your chest high and diaphragm up. Inhale slowly, counting mentally to five, six, or seven, filling your lungs without straining, pause a moment, and empty them in the same steady way, pause again, and repeat about twelve times Within a week, you will feel the vitalizing power of fuller breathing

Nemesis of Health

Eating and Drinking There is no doubt that the table is the nemesis of health for many Food and drink must do more than fill the stomach and appease the appetite They must do more than just provide the raw materials for body repair and growth, for energy and for warmth They must supply the essentials which keep the body regulated and functioning healthily and efficiently

In scientific terms, a healthful diet consists of one of foods which provide proteins for body-building, fats for warmth, carbohydrates for energy, and vitamins and minerals for health, at one and the same time

In practice, this means that a balanced day's fare should be based on the following one pint of milk (a quart for children), one serving of citrus fruit or tomato, one serving of another fruit, one serving of saladings, one serving each of two vegetables, one a leafy green, two servings of a protein

food—cheese, eggs, combined dishes of nuts, cereals, or legumes, and whole-wheat bread and cereals. When these foods have been included, to provide what the body needs, other foods can be added in moderation

In addition, the body needs from three to six pints of fluid daily, which, in part, should consist of milk, fruit or vegetable juices, or just plain water

Paramount Need

Exercise The need for physical activity is paramount in these days of mechanized transport, sedentary living and the increasing substitution of machines for muscles It is not necessary to take strenuous, exhausting exercise to keep fit, athletics, games, and taxing sports do not in themselves confer fitness Exercise fulfils its purpose in keeping the body healthy by supplying and toning the muscles and nerves, by gently but firmly benefiting the organs—which are muscular in structure anyway—and helping them to function effectively

The type of exercise needed, therefore, is stretching and relaxing exercises, rhythmic actions and motions which stimulate the blood and nerves, and loosen the muscles without causing exhaustion Such exercises are worth doing as the "daily dozen," together with such out-door pursuits as appeal to our nature

A ten to fifteen-minute walk before bedtime is more conducive to good sleep, and more helpful to bowel regularity than pills and cathartics

Physical activity performs another service to health in that it helps to unwind the hypertension of the nerves, which so much mental work and emotional stress engenders

Rest for Recuperation

Resting The corollary of physical and mental activity is rest

It is when the body is at rest that its recuperative forces can work most effectively Unfortunately, many people interpret rest as sleep, and rely on their sleeping hours to restore them exclusively But you can rest without sleep, and a day spent broken by rest will be well spent in the interests of your health Start by spending at least five minutes relaxed after eating Then break your day by fifteen minutes' complete relaxation on your back, if possible, each afternoon It is surprising how refreshing even short periods of such rest can be The secret is to let go all tension of muscle and mind for the period, letting the body go limp and the mind blanking out

Facing Emotional Stress

Preserving Emotional Balance The emphasis laid today on the importance of the influence of

mental and emotional experience upon the body and health is sometimes apt to mislead us Unhappy, distressing and conflicting emotional experiences do not necessarily mean that ill-health follows It depends upon how you react to them The body has a certain resistance and resilience to the ill effects of emotional disturbance, as it has to physical or organic disorder

To preserve a healthful emotional balance, the secret is to face any causes of distress and come to some decision about them If you do this, the stress is discharged, and cannot be transferred through the nervous system to impair bodily function in some way Where there is frustration and a sense of inferiority or self-blaming, a frank appraisal of oneself and one's talents is often helpful if it leads to taking action in facing life, and a new attempt to make something of it

Even those of us who try to live our lives as healthfully and rightfully as possible, sometimes reach bottom when some seemingly ill-merited blow strikes at our health and happiness It is then that our spiritual faith is tried, and if lacking, we may go under But to have a faith, even if it is only a faith in the good in life, gives a rock-like base from which a new start can be made, and such a faith can be all powerful in sustaining the hope and the reality of health

SOME VISITS ARE HELPFUL

Your visit to a sick friend can help or hinder his recovery Get his point of view and be considerate

JOHN M GIBSON

SO YOU frequently visit the sick? And you feel that you do a fine and helpful thing every time you go to see a sick friend?

Well, you may be right Your visiting may be all you think it is But you may be just kidding yourself Instead of dreading to have your visits end your sick friends may dread to see them begin And their charts may not look so good after you leave

It is a dangerous mistake to assume (as many people do) that a visit—just any kind of visit—is exactly what the patient likes and the doctor would prescribe Some visits are quite helpful Others—many others—are definitely harmful and anything but enjoyable for the patient

Being a good sickroom visitor isn't hard All you have to do is apply to that job the same courtesy and consideration you show and expect elsewhere

First, be considerate enough of your sick friend to find out whether you should visit at all What is his true condition? Is he so weak that the strain of having someone in the room besides the doctor and nurses will overtax his strength? Aside from its severity, is his illness or injury of a kind that would make you want visitors to call if you were similarly incapacitated? You can easily find the answers to these questions from the attending physician or the well members of the family.

Then, if you decide that a visit could be helpful, determine to make yours the helpful kind This means doing several things and avoiding doing several others.

For example, don't forget that many a sick person who would not be harmed, and might even be greatly helped, by a short visit may be much worse off after a long one Be guided by the nature and severity of the illness or injury If you do not know how long you should stay ask some member of the family Regardless of what you find out in advance, watch the patient for evidences of weariness He may try to hide them under a clock of courtesy or hospitality But they will show up in spite of his best efforts And when they do, end your visit at once In general, most visits to a patient in bed should not run over fifteen minutes

You remember how tiring it is to entertain visitors in your home even though you are well You know about that "let down" feeling after they leave And you are grateful to guests who require a minimum of entertaining

The sick person is your host, and entertaining you is a task for him too And he will be even more grateful than you are in your own entertaining if you will make his task as easy as possible Avoid awkward pauses that place a strain on conversation Don't wait for him to ask you questions Have a supply of them ready when you arrive, and assume responsibility for keeping the conversation going But don't just talk on and on just to be talking Deliberately bring up pleasant subjects Carefully avoid unpleasant subjects

Steer the conversation toward cheerfulness Remember, your sick friend probably has all the normal troubles you have, plus a great many others due to his illness And he is deprived of many of the pleasures you take for granted If you find the sickroom depressing, as you probably will, don't forget that he finds it even more so You will be getting away from it after a brief visit, but there is no escape for him until he recovers. It is a

(Continued on p 24)

PRESCRIPTION FOR SUCCESS

NORMAN SHIGON

No man or woman wants to be thought of as lacking in poise Posture is the key to graceful and gracious living

PROPER posture is essential to graceful living Therefore it is important to know how to compound this prescription—to achieve poise The trademarks of a good stance are a straight neck and a head carried well and high It is a good idea to pay attention to the habitual position of your head to remove any possibility of slouching

The wise person stands and walks correctly He has the appearance of great poise

There is an art to walking correctly Stand sideways in front of a tall mirror Imagine a cord attached to the top of your head, and that this cord is pulling your head straight up You will see your whole spine straighten as the cord lifts you slightly You will find that your buttocks tuck down and under automatically, your spine makes an attractive straight line, your stomach pulls in, and your shoulders relax

Now you are ready to walk correctly Step forward, with the entire weight on the forward leg, toes straight forward, knees just slightly brushing against each other Walk around the room, checking each time you go by the mirror to be sure you still have the easy straight look.

You will want to try these exercises for attaining proper posture

1 Stand erect Place the hands on the back of the head, let the chin drop forward on the chest, relax shoulders forward

2 Pull head slowly upward, using resistance of back neck muscles, until head and elbows are pulled well back Repeat twenty times.

Here is the second exercise

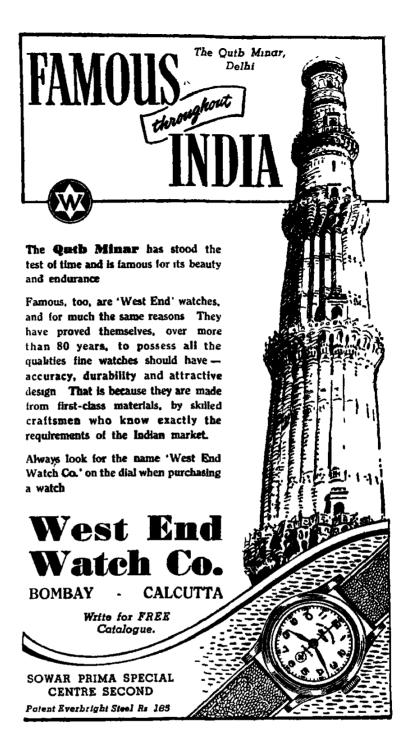
1 Stand without tension in lower back, shoulders, neck, or arms

2. Drop head forward on chest, raise upward.

3 Make circle with head slowly, starting toward the right Let jaw hang open, and avoid tension.

4 Continue circle to the left If slight dizziness is felt, turn more slowly, and rest between rotations Repeat six to eight times, alternating right to left

Common walking errors that every woman should watch and avoid are these walking with the

(Continued on p 24)

HOMEMAKERS' HELPS

RECIPES

Burnt Sugar Cake

Two cups sugar, 2/3 cup boiling water, 5 eggs, ½ teaspoonful salt, ½ cup oil, 1 teaspoonful vanilla, 2¼ cups cake flour

Melt ½ cup sugar in a frying pan until it is a rich brown colour Add the 2/3 cup boiling water to this, and stir until sugar is dissolved Set bowl containing eggs and salt over boiling water Beat until eggs are slightly more than 100°F and remove from water Beat until batter piles Add the burnt sugar solution slowly with beating This should be boiling hot when added Beat until batter piles Beat in remainder of sugar gradually *Fold* in the oil lightly and well Add vanilla Sift ¼ cup of flour at a time over the top and fold in Bake in a tube or layer pan at 325°F for 25 minutes Increase to 350°F for another 25 minutes, or until done

Vegetable Pea Soup

One-third cup barley, 2/3 cup split peas, 1¼ cups chopped vegetables, 1/3 cup chopped parsley; 3 teaspoonfuls salt

Put unpearled barley on to cook in 1 quart water, when boiling drop in the split peas and cook until barley is very soft and peas well mashed Into another pot put the finely chopped vegetables and 1 cup cold water When cooked, add to the peas Add parsley and salt Makes 2½ pints

Cream of Onion Soup

One pound onions, 2 pints water; 1 pint milk; 2/3 cup (2 oz) flour; 4 teaspoonfuls salt; chopped parsley.

Chop onions finely, and cook in the water until very soft Boil the milk, and add to onions Blend the flour in a little cold milk stir into the boiling soup, cook gently ten minutes Add salt, and serve at once sprinkled with chopped parsley Makes 3 pints

Tomato Roast

Two cans tomato soup; 6 wheat biscuits; 1 large or two small onions (fried or boiled); 1½ teaspoonfuls dried parsley, 2½ cups milk, 1 or 2 eggs if desired; salt, dash of sage

Mix all ingredients and bake in oven at 375°F until hot and the eggs are done About 8 servings

Mango Curry (Sweet)

Twenty-five ripe mangoes; 1 lb jaggery, salt to taste; 1 teaspoonful mustard; ground masala made up of a small piece of turmeric, 1 onion, 4 pepper corns, and a little garlic

Wash and peel twenty-five ripe mangoes, scrape all the pulp from the skins Mix this pulp and peeled mangoes with ground masala and add sufficient water Keep on fire and cook for ½ hour till mangoes are cooked Add 1 lb jaggery and salt to taste Stir frequently Season with oil and mustard

Khecheri

One cup rice; ½ cup dhall; 1 medium onion; 3 peeled cardamoms; ½ teaspoonful turmeric; salt to taste; 1 teaspoonful cumin; 4 cloves; one-inch stick cinnamon; 1 tablespoonful butter or substitute

Soak rice and dal separately for ½ hour Powder cardamoms, cloves and cinnamon Slice onion finely fry ½ quantity till rich brown and keep aside Mix turmeric with a little water Fry dal, cumin and powdered masala for 5 minutes Add remaining onion and turmeric Mix well and cover pan Fry for 5 minutes Add rice and fry till mixture begins to stick Cover with water standing one-inch above rice level Cook on very low fire till rice and dal are tender Garnish with browned onions

Shamrock Salad

Two cups boiling water, 2 packages lime gelatine; salt, ½ cup lemon juice; ¼ cup chopped green pepper (sweet capsicum), 1 cup finely sliced celery, 1 chopped cucumber; ½ cup shredded cabbage; 1 cup shredded carrots.

Add the boiling water to the prepared gelatin and the salt When thoroughly dissolved add 1 2/3 cups cold water and the lemon juice Cool (in refrigerator preferably) until partly jellied Add the vegetables Mould either in a square pan or individual moulds and serve on a lettuce leaf with mayonnaise

Spanish Sandwich Spread

A quarter cup shortening; ¾ cup chopped onion; 3 tablespoonfuls flour; tomato puree, thick, 1 pint, 3 well-beaten eggs, salt to taste

Fry onion in shortening until golden brown Brown flour slightly with onion Add tomato puree (tomato boiled to pulp) and seasoning Add the beaten eggs and stir slowly as they start to set Chopped dill pickle may be added Makes 8 to 10 sandwiches

Tomato and Marrow Pie

One pound tomatoes; ½ lb nutmeat; 1 lb. marrow; 2 teaspoonfuls salt; ¼ cup browned flour; 1 lb. mashed potato.

Skin and slice tomatoes, dice nut meat prepare marrow and cut into thick slices Arrange alternate layers in pie-dish Sprinkle each layer with salt and browned flour to make a thick gravy Cover with a crust of mashed potato, and bake in hot oven (450° F electric, 490 °F gas) until cooked and brown About 1½ hours Serves four

Fine tapioca is often sold under the name of sago, but real sago is different and has a different flavour It is called "brown sago" It is made from the sap of an East Indian tree while tapioca is made from a root that grows in the West Indies

KIDDIES' KORNER

COURAGE OR COWARDICE?

Arther S. Maxwell

SCHOOL was out. Most of the children had gone home So had all the teachers There were just the usual few lingering in the playground as though loath to leave the place. One group was practising at the basket-ball net Another was arguing fiercely over a "mistake" an umpire was supposed to have made at the last cricket match Others didn't seem to have anything to do at all

As for Dan, he was amusing himself by throwing a ball into the air As he caught it for the twentieth time, he heard a girl's voice behind him, saying, "See how high you can throw it!"

It was Joan, a very nice girl, and a very pretty girl, too Dan was pleased that she had noticed him He would gladly throw the ball over the moon for her, if he could

"I'll try," he said, smiling

Dan flexed his muscles and threw the ball into the air It went up a long way, but evidently not high enough to please Joan

"Oh, you can do better than that," she said

"All right, I'll throw it again," said Dan

"Oh, that wasn't so good," said Joan

"Wasn't it? I thought it was," said Dan "But I'll try once more"

He tried again and again In fact the two were having quite a nice time together all on their own when suddenly there was a loud crash The ball, in its downward flight, had gone right through one of the classroom windows

Instantly the playground was empty It was almost unbelievable how all those children vanished This way and that they scattered, and less than a minute later only Dan and Joan were left

"Did you ever see the like?" asked Dan "What a lot of scaredy-cats! Running away like that! And *they* didn't break the window!"

"Well, what are you going to do?" asked Joan

"I'm going to tell the head master, first thing in the morning"

"He'll be very angry," said Joan

"I can't help that," said Dan, "any more than I can help breaking the window, can I? I'll just tell him what happened, and offer to pay for it That's all"

"Oh Dan, I don't think I could," said Joan "I'd be too afraid But I'm glad you are going to tell him, just the same"

Next morning Dan was first to arrive at school In fact, he was there when the head master himself arrived

"May I speak to you, sir?" he said

"Certainly, Dan," said the head master "What is it?"

"Yesterday afternoon, sir, after school, I was playing ball and broke a window It was quite accidental I would have told you last night, but you had gone home I am very sorry, and I want you to know that I will pay for it"

For a moment the headmaster, speechless, leaned back in his revolving chair Then he rose to his feet

"I want to shake hands with you, Dan," he said "I wish I had a hundred boys in this school like you That's the best speech I've heard since I came here I'm proud of you, son God bless you!"

Dan thought he saw tears in the head master's eyes, but he wasn't quite sure And he couldn't think why there should be

Outside the headmaster's door he ran into a crowd of excited boys and girls It seemed that everyone knew why he had been to see the headmaster

"Why did you go and tell him?" cried one "What a stupid *thing to do*!"

"He'd never have found out if you hadn't told him," shouted another

"Sissy!" sneered a third "You don't have to tell on yourself when you break a window"

Suddenly Joan spoke up

"He's *not a sissy*!" *she* said angrily "I think he's a very brave boy *You* are the cowards for running away"

"Ha, ha, ha!" scoffed another "You would say that! You're a sissy yourself"

Joan looked daggers at him, but she didn't say what she wanted to say Fortunately, at that moment the bell rang and there was a wild scramble for the door

Somehow in the scrimmage Joan found herself next to Dan

"What did he say to you?" she whispered

"He said, 'I'm proud of you,'" whispered Dan

"Good," whispered Joan "So am I"

And that made Dan very happy for the second time that day

"The greatest test of courage on the earth is to bear defeat without losing heart"

—R E Ingersoll

PRESCRIPTION FOR SUCCESS

(Continued from p 21)

spine curved and the hips protruding, **walking** with your chin leading you, walking out with a mannish, exaggerated stride Any one of these is fatal if you would be lovely and poised in appearance

You can have the poise of a graceful and charming woman A great mark of poise is the ability to walk into a room, choose a chair, and sit down in it calmly Learn how to sit quietly, without fidgeting, in a graceful position Keep your hands and feet under control *Do not make nervous gestures with your hands nor shuffle your feet uncomfortably*

It is a good idea to practise correct sitting Use a straight chair—walk to it, turn, and lower your body from the hips, keeping your back straight Now, rise slowly from the chair, keeping your torso from the waist up perfectly straight, with the head well back Assume perfect standing position, and walk around the room Then sit down in the chair again Repeat until you are sure you know how to sit down gracefully

Be sure, when you sit in any chair, that you sit far back enough to be comfortable Never perch on the edge, it makes you look tense and nervous Never sit stiffly on a straight chair, you will never look poised if you do You will look more graceful if you place one foot slightly in front of the other, and your hands loosely in your lap

Should you wish to cross your legs, there is a way to do it with ease—and it is the only way to sit with crossed legs Turn slightly in your chair toward the right, and cross the right leg over the left The right foot will touch the left ankle and the left foot will turn slightly to give a graceful curve to the foot and leg If you think it necessary, practise in front of a mirror until you are comfortable and sure you look graceful

Relax when you are sure that you have assumed a graceful sitting position Remember that an easy, correct sitting position will help you gain an attractive figure Also a correct standing and walking position will help you to have a more pleasing appearance

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SOME VISITS ARE HELPFUL

(Continued from p 20)

twenty-four-hour-a-day, seven-day-a-week sentence for him And don't forget that physical idleness tends to stimulate emotional activity Unlike you (fortunate person!) he cannot get his trouble off his mind by taking a vigorous walk, playing a game of golf, or going to a concert It is much harder for him to keep his spirits up Make your visit a bright spot in his day

But don't carry cheerfulness too far Don't exude Pollyannism Don't try to tell your friend he is not really sick, when he knows perfectly well that he is Chances are that he knows pretty well how sick he is

Your sick friend is interested in what you and his other friends are doing, of course But don't condemn him to the shattering experience of listening to a long recital of pleasures you enjoy but which have been taken from him Telling about the great time you had on a hike may bring tears of envy (and perhaps a relapse) to someone who loves hiking but cannot walk a step

Finally, avoid the martyr's pose Don't let anybody, especially the patient, get the impression that you are performing a noble and distasteful duty If you cannot feel genuine, honest enthusiasm for your visit and show by every word and movement that you are enjoying it, you'd better stay at home and send a "Get well" card or gift

PROTEINS

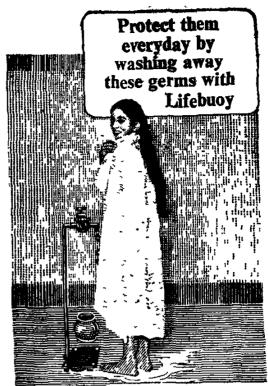
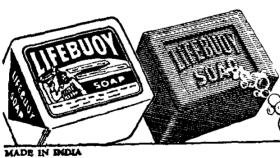
(Continued from p 17)

gluten 40. Although vegetables and potatoes contain relatively small amounts of protein, the quality is high, and they effectively supplement the other proteins

From extensive research many of the country's outstanding nutritionists agree that meat in the diet is not essential to good health Studies of malnutrition in Europe's war victims revealed that a protein deficiency occurred only in those with a gross lack of calories When 95 to 100 per cent of the protein came from cereals and potatoes, no protein deficiency occurred if enough of these food products could be obtained Persons with a protein deficiency improved with more of the same type of food

Hegsted and Stare of Harvard have said, "It is most unlikely that a protein deficiency will develop in apparently healthy adults on a diet in which cereals and vegetables supply adequate calories" Similarly, Sherman has stated, "If we can take care of the calories, the proteins will take care of themselves" And further, in Wright's *Applied Physiology,* page 1055 we read, "In any mixed diet, even if wholly of plant origin, the proteins are sure to be sufficiently varied to compensate for any individual inadequacies in amino acid content, if only the total amount of protein is sufficient"

McLester has remarked that it is compatible with good nutrition to replace meat entirely with milk and eggs and that "from a certain standpoint, much might be gained thereby"—*Nutrition and Diet in Health and Disease,* p 188 Dr E V McCollum has said that "a vegetarian diet, supplemented by fairly liberal amounts of milk, is the most satisfactory diet that man can take"—Quoted in Harold S Diehl, *Textbook of Healthful Living,* p 147

According to Sherman, "When

grain products, vegetables, fruits and milk have all been given their full places in the diet, the result is a food supply and dietary of such excellence that the extent to which meats, fats and sweets are added is of relatively little consequence in normal nutrition."—*Essentials of Nutrition*, p 334.

Dr M G Hardinge and other nutritionists of the College of Medical Evangelists heartily agree with these outstanding investigators Their work is further supported by the following statement "Fruits, grains, and vegetables, prepared in a simple way, free from spice and grease of all kinds, make, with milk or cream, the most healthful diet"—*Counsels on Diet and Foods*, p 92

1 This question and answer service is free only to regular subscribers

2 No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases

3 All questions must be addressed to The Doctor Says Correspondence personally with the doctor is not available through this service

4 Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES Answers cannot be expected under ONE MONTH

5 Questions sent in on Post Cards will not receive attention

6 Make questions short and to the point Type them or write them very clearly

7 Questions and answers will be published only if they are of such a nature as to be of general interest and without objection but no name will be published Address The Doctor Says Oriental Watchman and Herald of Health P O Box 35 Poona 1

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FAINTING SPELLS Ques —"I have frequent blackouts which may come on while standing or sitting When I get over them my forehead feels funny How can this be over come? I am not anæmic "

Ans —Some people faint more readily than others There is such a thing as postural hypotension The blood pressure drops and leaves one rather flat especially when one has been standing, but it sometimes occurs when sitting This may be noticed during convalescence from an opera tion or any serious illness Neuro circulatory asthenia is a similar dis order seen in persons of a high strung temperament In this condi tion the systolic and diastolic blood pressure tend to converge, leaving the pulse pressure weak In any case it would be advisable to have a general physical examination, with blood count, to confirm the fact that your blood is up to par Some women have so they tell us, a low blood volume in spite of a fairly normal blood count Blood volume is difficult to compute so is not done routinely

Many women have to take iron about one week out of every month to keep their blood up Grapefruit and tomato juices are rich in iron A glass of one or the other daily could be taken with benefit Do not resort to tea coffee or other stimul ants as they only make matters worse in the end Outdoor exercise such as working in the garden would be beneficial Be sure to get your "three deep breaths three times a day " An erect posture in sitting and standing is important

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SPITTING HABIT Ques —"I do not smoke or chew pan but I have a very bad spitting habit Much saliva accumulates in my mouth and I find the need to constantly clear it How can I stop this habit?"

Ans —A large amount of fluid is secreted by the glands of the mouth constantly Ordinarily this fluid is swallowed unconsciously You must educate yourself to swallow rather than to spit the fluid out Do not permit your mind to dwell upon the subject to such an extent that you have to be conscious of what you are doing

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NAIL BITING. Ques —"I have the habit of biting my nails How may I overcome this habit?"

Ans —Nail biting is a nervous habit and can be controlled only by overcoming nervousness and by con sciously refraining from biting the nails You might get some prepara tion of Aloes or of Quinine to paint on the nails and under the nails each day This is a bitter substance and will call your attention to what you are doing when you start biting your nails

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CONSTIPATION Ques —"I am enclosing herewith full details of my diet and the history of my case It would seem to me that ever since an alcohol injection in the back, I have suffered with constipation I have used cathartics regularly Kindly advise me what I should do "

Ans —An injection of alcohol in the back should not cause constipa tion I am afraid that you have a cathartic habit, or constipation due to taking too many cathartics The use of a cathartic supplants the normal nerve control of the bowel and in time the nerves cease to function and the body depends entirely on the effect of the cathartic I would suggest that you stop using cathartics and try to get on a regular programme as fol lows

1 Upon rising in the morning, take the juice of one lime in a glass of water without sugar

2 Have a set time for motion, pre ferably after the morning meal Wait until you have had a motion

3 Eat an abundance of fruit and vegetables

4 Get some exercise in the open air and sunshine each day

5 Take eight 8-ounce glasses of water daily

6 If the bowels do not move, take some stewed figs in the evening meal

7 If it is necessary to use some special medicine to move the bowels take an enema, but do not get into the habit of relying on enemas The enema habit can be as disastrous as the cathartic habit

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GRINDING OF THE TEETH Ques —"My twelve year old brother has the habit of grinding his teeth while sleeping How may he overcome this habit?"

Ans —Grinding of the teeth in sleep shows nervousness and is many times associated in children with the presence of intestinal worms He should have a stool test by a competent physician and should take the treat ment indicated He should get to bed early and also should be on a non stimulating diet

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INCREASING WEIGHT Ques — "In the November issue of HEALTH it was suggested that Shark liver oil be taken daily besides proper food and exercise to increase ones weight I have taken cod liver oil for months but no effect I now want to take some preparation of eggs Kindly advise as to the trade name and essence of liquid eggs and from where it may be obtained "

Ans —You should take one or two eggs a day and I would advise that you get them from healthy fowls Soft boiled eggs are the most easily digested I would also suggest that you take some well-prepared dhal

each day and eat an abundance of fruit and vegetables to supply the necessary vitamins and minerals Whatever grain you take be sure that it is not highly refined, as much that is valuable is lost in the refining process I cannot recommend any essence of the so-called liquid of eggs

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NATURE CURE BOOKS Ques—"I shall be much obliged for any information on literature or books on NATURAL CURE"

Ans—We have two or three publications in which you could find valuable instructions on water treatment for the cure of certain diseases These books do not deal entirely with natural cure, as we do not publish special books on the subject, but being believers in various treatments for the cure of diseases by natural methods, we have chapters in the books we publish

The following are the books with prices.

Health and Longevity	Rs 10 8
Health and Healing	Rs 6 8
Guide to Better Living	Rs 12 8
Best on Health	Rs 3 4

If you desire to have any of these books, kindly send your remittance to the Manager, Oriental Watchman Publishing House, Post Box 35, Poona, and he will be glad to send them to you

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BODY BUILDING AND INCREASE OF STRENGTH Ques—'My 20 year old son weighs only about 100 pounds He desires to build up his body and increase his strength How may this be done?"

Ans—Your son may be able to build up his body and increase his strength by the following programme

a Exercise daily in the open air and sunshine

b Eat an extra amount of food each day with special emphasis on protein and natural fruit and vegetables which are rich in vitamins and minerals He should eat whole grains

c He might supplement his diet with some good B Complex tablets and with a teaspoonful of Shark Liver Oil two times a day

d Brewers Yeast Tablets three times a day would stimulate his appetite and help him to put on some weight This could be given in place of the B Complex

'Health reform is an intelligent selection of the most healthful articles of food prepared in the most healthful, simplest form"—E G W

BABY IS A SHOW-OFF

(Continued from p 12)

Remember too, when you have guests, people all love babies, but with limitations. No matter how cunning baby is as he sits in the middle of the floor waving his rattle or crawling about, adults enjoy conversation—conversation that revolves around something else besides baby Making him the centre of all comments will not only bore your guests but actually harm him, because it simply encourages his show-off tendencies

Be proud of your child by all means, but don't try to keep him in the limelight continually Let your guests see him and talk to him, then you hold him awhile and quietly rock him, while you direct conversation about other topics

Baby can be trained early to be a good listener Listening thoughtfully to others is a priceless character asset from the cradle to the grave

At mealtime too, especially if there are guests, baby need not be the centre of all eyes and conversation If your guests are always made to notice baby, and each one takes a hand at feeding him or coaxing him to eat, he will soon realize that he is an important attraction He will try to keep the spotlight on himself by refusing to eat, thus getting more notice and satisfying his extrovert tendencies.

When he gets to the high-chair age, set him in his chair, place his food before him, and then ignore him If you must assist him in getting it to his mouth, do so without great fuss or show Intersperse his feeding by continuing to chat with your guests or by eating your own dinner Let baby learn to sit and look on for a while It will be better for his nervous system and his character

Even very young babies know that they are being watched When the Psychological Clinic of Pennsylvania State College decided to study the reactions of young babies, they put them behind one-vision glass screens. Thus they could observe the babies without their knowing they were being watched The babies behaved quite naturally

Knowing that baby likes to be a star performer isn't alarming, but it is worth recognizing and admitting, so that you can act accordingly You don't want your child to be repressed, but I'm sure you agree that nobody loves a show-off at any age, not even in the cradle crowd! And the most important outcome is that baby will develop a rounded character, being taught to be kind and thoughtful to others

Whatever your child's temperament, whether "easy" or "difficult," never let it be said that you took the lazy way out!

HOW TO TREAT THE FLU

(Continued from p 9)

hot Leave it on the chest three to four minutes, with the patient snugly covered with blankets As soon as it gets comfortable (cool), have another pack ready Quickly remove cool one, briskly dry the skin with heavy Turkish towels, apply the new one

Give a set of three packs to the chest After the last one, dry the skin Go over the chest with a cloth lightly wrung out of cold water Dry well Don't be afraid of hurting the patient; be fast and firm The skin should have a ruddy glow

Cover your patient, have him turn over, and proceed on the back as you did on the chest After the third pack, quickly go over the back and arms with the cold, exposing one part only at a time, then dry and cover it If desired, you may apply to the back and chest one of the counter-irritant rubs advised by your doctor

Put on sleeping clothes, remove damp blanket, and cover patient carefully in his fresh bed Do not allow him to be exposed for a moment Continue drinking of water and fruit juices Your patient may fall asleep, and awaken refreshed and improved

Inhalation of medicated steam is agreeable and beneficial to irritated and congested respiratory passages Use about one pint boiling water Drop into a small basin of boiling water a half to one teaspoonful of oil of eucalyptus

A twenty-four-year-old girl weighing 250 pounds was sick at home with influenza She had tried the routine treatments for several days, but her temperature was still 101° F, and she felt weak and ill She was given a brisk hydrotherapy treatment with hot foot bath fomentations to the chest and back, followed by a brisk cold sponge Next day she was like a new person Her cold was broken

A little boy four years old—a patient of mine—had an acute chest cold and croup He breathed so heavily at night that he disturbed the whole family At one o'clock in the morning, they called me I heated water, and using heavy Turkish towels, gave Michael, screaming and kicking, his first hydrotherapy treatment. I then administerated some medications Before I left the sickroom the little patient was dropping off to sleep, breathing normally Mother called next morning stating, "He slept just like an angel"

A woman patient of mine whose husband had been in a tuberculosis hospital for two years came down with a severe chest cold and typical influenza, with a temperature of 102° F Again I used the best medications known, plus the hot fomentation to chest and back Only two hours later she looked like another person, and said she felt grand Her temperature was

normal, and the tightness in her chest had given place to a loose cough

The Battle Creek Sanitarium was the first institution in America to use hydrotherapy, not only for influenza and pneumonia but also very effectively for arthritis, backache, high blood pressure, kidney disease, and as a tonic for persons who had become fatigued by a too strenuous programme of work or study

Hydrotherapy assists nature in combating diseases caused either by indiscretions in eating and drinking or by invasion of bacteria *Nature must cure herself.*

So learn to *assist,* not destroy, your own vital resources in healing disease It is your body; stop abusing it The best way to fight influenza is on your back, so go to bed Don't smoke, don't drink alcoholic beverages, don't crowd your digestion Work with, not against, your body defences

EAT RIGHT AND STAY YOUNG

(Continued from p 7)

just take dessert or a cup of coffee And then we simply have to have another snack in the middle of the afternoon

This means that we have tried to work all day on a diet that, while it may be relatively high in calories, is seriously lacking in the most vital and important elements—minerals, vitamins, and proteins Then at night, when we are tired and should be resting, we take on a really big meal, just at the time when we do not need it The poor stomach and intestines work hard trying to handle the food as best they can, but often they rebel at such treatment So we have more tea or coffee at midnight, or we cram down some bicarbonate of soda, and then we lie there and suffer for our nutritional sins. Because the body is too tired to use the food properly, it stores it away around our middles as fat. This senseless way of trying to live explains why so many people are overweight, and yet at the same time under-nourished They are wearing out fast, long before their time.

Any chronic lack of minerals and proteins in the diet eventually leads to anæmia. We may not realize it until we start to feel weak, dizzy, and tired all the time. So we trot off to the nearest doctor for some injections, or some pills, or something. We tell him that we are tired out, that we feel "like a wet rag." It is not the pills and injections that we need, but rather a sensible method of living. Life is far from pleasant when we are continually weak and run down. We need to realize that much of this weakness may start at our own breakfast tables Remember, there is no iron in a cup of coffee or tea!

An impoverished diet is likely to land anyone in the cemetery long before his time Dietary deficiences are responsible for many serious illnesses, including some nervous breakdowns Then, to add insult to injury, some of us may grab a cigarette, in the mistaken idea that it will calm our nerves This is a bad habit when one is tense and nervous, but it is very much worse on an empty stomach Many a nervous person has completely wrecked his digestive organs by this unfortunate habit. Nothing will bring on stomach ulcers more quickly than smoking when one is hungry And because some of us fail to eat right, we frequently develop severe headaches So we swallow an aspirin tablet or some other headache medicine, to try to cover up the uncomfortable fact that the whole body is fighting within itself It is crying out for a sensible, balanced programme of living It is asking for the necessary foods of life, those foods that are so essential if we are really going to live.

Our appetite is never a reliable guide to what to eat We can be so easily deceived We can spend our money for things that look good But many of them are worse than useless It never pays to be ignorant, especially in the choice of our food Our appetites need to be educated so that they will not lead us into those nutritional mistakes that may prematurely shorten our lives Over-eating is often a short cut to the cemetery We can save ourselves much expense and pain simply by learning to live right And even though we may be suffering from the nutritional sins of the past, there is still much that we can do to help ourselves. *By changing*

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to a sensible programme of living, even now, we can help to overcome the effects of damaged arteries, and shrivelled glands, and dried-up bone marrow

Good nutrition is the secret of happy living. It is the only real way to health Good nutrition includes regularity in eating It also means avoiding all those things that destroy the body Self-indulgence never builds a strong mind or a strong body To stay young and healthy we need a simple diet, one that is rich in fruits, and nuts, and whole grains and vegetables There is real wisdom in choosing such a diet This is the natural way to health

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Men Who Proved the Bible True—No. 5.

Excavating in the Land of the Pharaohs

W. L EMMERSON

SINCE Napoleon landed his corps of savants in Egypt in 1798 to survey its ancient monuments, the land of the pharaohs has attracted an unending stream of antiquarians and archæologists, and an immense fund of knowledge has been gained which substantiates in a wonderful way the Bible account of Israel's contacts with Egypt from the days of Abraham to the Babylonian captivity and after

If we take the key text in 1 Kings 6 1 as the basis of our chronology, we note that the "fourth year of Solomon's reign over Israel," which the *Cambridge Ancient History* puts at 967 B C, *was* the "four hundred eightieth year" after the Exodus, so that this event must have taken place around 1447 B C

As Moses was eighty years old at the time of the Exodus, his birth would be about 1527 B C, while the days of Joseph, some three hundred years before the Exodus, would be about the middle of the nineteenth century B C, with Abraham's visit to Egypt about a century and a half earlier than that

With these approximate dates we turn to the story of Egypt as it has unfolded upon the monuments, and the Bible story begins to come vividly to life

The pharaoh whom Abraham met when he went down into Egypt must have been one of the Middle Kingdom monarchs, and these pharaohs still ruled Egypt when Joseph reached Egypt as a slave and in due course rose to a position of authority next to that of the king

As Abraham followed the course of the Nile down to the Fayoum, which was the royal seat of the Middle Kingdom pharaohs, he would see the great pyramids of Gizeh and the mysterious sphinx, which were already many centuries old Nearing his destination he would note the lesser pyramids which the thirteenth dynasty pharaohs were still building Perhaps he even saw one under construction

APPROPRIATENESS OF PHARAOH'S DREAM

The picture broadens and becomes more detailed when we come down to the days of Joseph, every detail of whose life from prison to power is illustrated in the monuments

Pictures of the sacred "kine" of Hathor wallowing along the banks of the Nile is a common theme in Egyptian tomb painting and sculpture, and recalls the dream which first brought Joseph to the notice of Pharaoh (Gen 41)

That Joseph should have "shaved himself" to appear before Pharaoh is understandable seeing that the Egyptians of the monuments are invariably clean-shaven

Opposite the village of Benihassan, a short distance up the Nile from the Fayoum, is a series of cliff tombs of the "Lords of Benihassan," who were among the chief supporters of the Middle Kingdom pharaohs

In many of the thirty-nine tombs are fine wall paintings vividly illustrating the life of that day Most interesting of all is one which features a caravan of Semitic visitors being received by an Egyptian official on behalf of the "lord" Khnemhotep

The characteristic features, hooked noses, and beards of the visitors, clearly reveal their Asiatic origin, and in the inscription below they are designated Amu or Bedouin

There are clad in the "coats of many colours" dear to the Asiatics, and the name of their leader, Absha, is not unlike the biblical name, Abishai Their merchandise was green eye paint, very popular with the ladies of Egyptian society, and in return they doubtless secured food and other products of the Nile valley

These visitors from Syria came some three quarters of a century before Jacob's sons, but the scene depicts the kind of reception which these patriarchal visitors would receive

THE CEREMONY OF "THE GOLD"

Elsewhere along the Nile there are many other tombs which, while earlier or later than Joseph, provide us with a remarkably complete picture of his exaltation and the kind of duties which he would perform

At Tell el Amarna, about half-way between Cairo and Luxor, or ancient Thebes are the tombs of some high officials of Akhnaton or Amenhotep IV, whose exaltation to office was exactly like the ceremony performed at Joseph's investiture

Meri-Re proudly records his installation as high priest of Pharaoh Akhnaton, his artists portraying him receiving several gold collars, while his servants awaited, with his chariot, the conclusion of the ceremony

Other nobles at El Amarna also record the granting to them of "the gold" or the "Gold of praise" just as Joseph was honoured (Gen. 41: 42), and the vivid little touches introduced into the various pictures conjure up for us the rejoicings of that great day

When one realizes how these tomb paintings and inscriptions bring the Bible story to life, one can pardon the exaggerated price of the officials who have left us these priceless records

A HIGH OFFICIAL AT WORK AND PLAY

Only a short distance below Cairo are the step pyramid and tombs of Saqqara. These are older than either

Joseph or Abraham, but their tomb pictures carved in wonderful relief, are among the most exquisite in Egypt and give us a most comprehensive idea of the work and leisure of a high Egyptian official

We can see in the young well built and alert court secretary Ti in his tomb at Saqqara a picture of Joseph in the days of his prime We can imagine his busy life, too as we see Ti inspiring harvest operations, watching the corn being put into sacks and conveyed to the threshing floors and the winnowed grain being bagged for storage

Elsewhere we can see Ti receiving produce borne on the heads of Egyptian women from different villages or watching the arrival of boats at a quay on the Nile just as Joseph must have done when he was collecting the produce of the years of plenty

Joseph's accountants must have looked just like Ti's assistants squatting on the floor with their record tablets resting on their knees and his head clerk probably had a desk with tablet racks by its side just like Ti's chief assistant Perhaps on occasions Joseph had to invoke the services of the "arm of the law" as in one of Ti's pictures which shows unwilling Egyptians being dragged by policemen with heavy cudgels under their arms to the tax office!

Over on the other side of the Nile to the north east of Cairo is a mighty obelisk which is all that remains of the temple of the sun god Re built by one of the twelfth dynasty pharaohs Here the father of Asenath was a priest (Gen 41 45) This obelisk was erected by Sesostris I son of the founder some three hundred years before Joseph, and must have been seen by him many a time on his routine visits Perhaps the sun was glinting and gleaming upon its polished gold cap when Joseph first met Asenath and resolved to make her his wife!

The story of Israel in Egypt changes quite abruptly in the book of Exodus "Now there arose up a new king over Egypt which knew not Joseph" (Exod 1 8) and thereafter follows the account of the bondage and the birth of Moses God's appointed deliverer

When the history of Egypt is studied upon the monuments the reason for Israel's change of fortunes becomes very obvious It appears that the Middle Kingdom of Egypt was overthrown by an invasion of Hyksos or "Shepherd Kings" of Semitic origin from Asia, who ruled the land for two centuries or more During this period the Israelites no doubt continued to fare well, for the usurpers would recognize them as of their own race

Eventually however the Egyptian nobles succeeded in mustering sufficient forces far up the Nile above Luxor the hated Semites were expelled and the New Kingdom was inaugurated by the eighteenth dynasty pharaohs with their principal seat of government at Thebes or modern Luxor

Naturally the Israelites left behind after the expulsion of the Hyksos were associated in the minds of the Egyptians with the foreign usurpers and were promptly reduced to servitude

The Bible dating of Moses birth is 1527 B C, falls in the reign of Thutmose I, who was the first of the great kings of the eighteenth dynasty, and synchronizes perfectly with the new king of Exodus 1 8

In the Bible story the "daughter" of pharaoh is literally the "crown princess" or heir and the monuments actually record the fact that Thutmose I appointed his daughter Hatshepsut as his heir and that she did succeed him on the throne

On the walls of Hatshepsut's temple at Deir el Bahri in the western cliffs of the Nile Valley opposite Luxor, the great queen inscribed her father's decree 'This is my daughter," the proclamation ran, "the consort of Amon Hatshepsut the living She is my successor, she shall sit upon my glorious throne She shall command the people in all parts of the palace for she shall lead you ye shall hear her words and be united at her command"

Having such a prospect even during the life time of her father, it is entirely understandable that no protest should be raised at her whim of adopting the little Israelite baby she found by the bank of the Nile and bringing him up in the royal palace

GLIMPSES OF MOSES' YOUNG MANHOOD

The Old Testament record does not dwell in detail upon the young manhood of Moses in Egypt, but the New Testament makes three significant references to him, one about his education, another about his activities, and a third about his character

It is stated that he was "learned in all the wisdom of the Egyptians Acts 7 22 This phrase conjures up an intriguing picture of the young protege of Hatshepsut going from one temple school to another until he had acquired all the knowledge they could impart to him His masters of letters stood him in good stead when later God bade him "write in a book the laws which he was to communicate to the infant nation of Israel His studies in mathematics and astronomy would prove valuable when the time came for him to plan the tabernacle in the wilderness "according to the pattern' showed him "in the mount (Heb 8 5) and plan the sacred calendar of Israel

We learn secondly that Moses was mighty in deeds" (Acts 7 22) which may mean that he took part in the extensive building operations of his royal foster mother and perhaps also that he was associated with some of the commercial expeditions which brought back to Hatshepsut precious stones from the Sinai mines and the treasures of Nubia and Ethiopia

Lastly, we are told that Moses esteemed the reproach of Christ "greater riches than the treasures of Egypt" Heb 11 26 Some idea of the riches which he voluntarily forsook we can gain by a study of the "Treasure of Dahshur," the "Treasure of El Lahun," and other rich trophies in the Jewel Room of the Cairo Museum, or by wandering through the Hall of Tutankhamen which contains the priceless coffins and associated treasures from the tomb of this comparatively minor pharaoh Wealth such as this and more Moses forfeited in order to throw in his lot with the chosen people of God and for the hope of an unfading and eternal reward

Thus a multitude of voices from the dust of Egypt's sands are today witnessing to the truth of the Bible story of Israel's sojourn in the land of the pharaohs.

Millions Today Are Saying:

"WE WOULD SEE JESUS"

ALICE CRONE TWILLEY

THE city streets had been thronged for days with people who had come from the far corner of Palestine to celebrate the Feast of the Passover The rich rubbed elbows with the poor and many voices in strange tongues made tumult night and day A constant stream of humanity went in and out of the place of worship, performing the ceremonies of the festival Yet in the midst of the babel of voices, the clatter of vehicles on the stones of the street, and the ringing of bells, one could hear a name mentioned over and over again A little company of Greeks, startled into listening to the strange stories that accompanied the whispered name at last accosted a stranger nearby "Sir, we too, would see this Jesus!"

The desire to see and apprehend Jesus lies deep in every human heart Each of us feels the need of some one to satisfy the hungers that the world cannot feed, we experience a poignant longing for a Saviour who can deliver from the power of sin we are questing for an ideal that will pull us up to our best and hold us there We would see Jesus

A group of missionaries on tour in India came to a region where there were no mission churches, no hospitals, no Christian schools, and yet among the people there seemed to dwell a spirit of love and brotherhood By means of an interpreter the visitors began to tell of the life of Jesus and His purpose among men, of His power to save from sin and elevate life to its highest and best To their great surprise as the story unfolded, those who listened began to nod in agreement and to speak to one another in happy, eager voices Presently one of them said confidently "We know Him He has passed this way He dwelt among us for a whole year"

"Ah no," answered the missionaries "He of whom we speak lived in the flesh almost two thousand years ago, and now, although we cannot see Him, He comes to us in the Spirit"

The natives however, persisted in their declaration "We know Him, He dwelt among us"

As the touring group went on, each new village bore the same testimony They had not known that the man's name was Jesus, but they knew of a certainty that He had passed that way

After several weeks of doubt and bewilderment on the part of the missionaries, they finally heard the story of a quiet man of God who, twenty five years before, had indeed so lived among these people in the spirit of Christ that when they heard the story of the Master a quarter of a century later, they felt certain that they had *seen Jesus*

This shaken, doubting questing world needs disciples like that today Spiritually hungry people are not crowding our churches, because too often they are not fed there One does not persistently go back to a table that is empty of food No matter how fine the porcelain or how shining the silver if there is no food, life is not nourished or revived The fault lies in all of us who profess to be His followers We have made of our religion an ark which we handle gently and treat with reverence but which we keep isolated from our daily activities

I, too, am eager to see Jesus, to see Him expressed in radiant faces that even in these days of stress and *fear show forth His joy I am eager* to see Him revealed in personalities that face life unafraid honestly, daringly, challengingly I am seeking for Jesus in lives that are unselfish, loving, sacrificial We profess much yet our lives seem to show that we possess so little of that wonderful magnetic power which was in Christ Jesus and which is ours for the asking

Power has its price "If My people, which are called by My name, shall humble themselves, and pray, and seek My face and turn from their wicked ways, then will I hear from heaven and will forgive their sin and will heal their land" 2 Chronicles 7 14

There was a time when people knelt in magnificent cathedrals, made *dim and reverent by a holy light* through stained glass windows, and said to themselves, 'This is religion' *There* have been moments when the lofty music of inspiring choirs has lifted our spirits until we felt ushered into the very presence of *God* The Christian faith has long been associated with beautiful customs and

(Continued on p 34)

YOU AND THE BOOK

LANDLORD AND STEWARD

ALMA L TIBBS

1 1 Timothy 6 7—Man has no control over the wealth of the world

"For we brought nothing into this world, and it is certain we can carry nothing out"

2 Matthew 25 14—While here he is a steward

"For the kingdom of heaven is as a man travelling into a far country, who called his own servants, and delivered unto them his goods"

3 Psalm 24 1—The earth belongs to God

"The earth is the Lord's, and the fullness thereof, the world, and they that dwell therein"

4 Haggai 2 8—All inanimate wealth is His

"The silver is Mine, and the gold is Mine, saith the Lord of hosts"

5 Psalm 50 10, 11—Every living creature belongs to Him

"For every beast of the forest is Mine, and the cattle upon a thousand hills The wild beasts of the field are Mine"

6 1 Corinthians 6 19—Man himself belongs to God.

"What? know ye not that your body is the temple of the Holy Ghost, . and ye are not your own?"

7 Deuteronomy 8 18—Power to acquire wealth is given by Him

"But thou shalt remember the Lord thy God: for it is He that giveth thee power to get wealth"

8 Leviticus 27 30, 32—God requires that man return to Him one tenth

"And all the tithe of the land, whether of the seed of the land, or of the fruit of the tree, is the Lord's it is holy unto the Lord And concerning the tithe of the herd, or of the flock, even of whatsoever passeth under the rod, the tenth shall be holy unto the Lord"

9 Leviticus 27.33—The tenth is holy whether or not it seems to have promise in the eyes of the person who is squaring up his obligation

"He shall not search whether it be good or bad, neither shall he change it"

10 Malachi 3 8—Failing to do this, man robs God

"Will a man rob God? Yet ye have robbed Me But ye say, Wherein have we robbed Thee? In tithes and offerings"

11 Matthew 23 23—Jesus taught that man should be exact in tithing

"Woe unto you, scribes and Pharisees, hypocrites! for ye pay tithe of mint and anise and cummin, and have omitted the weightier matters of the law, judgment, mercy, and faith these ought ye to have done, and not to leave the other undone"

12 Leviticus 27 31—God required anciently that a man who proposed to redeem his tenth sheep (or other animal) should add a fifth of the value to it for the tithe

"And if a man will at all redeem ought of his tithes, he shall add thereto the fifth part thereof"

13 Malachi 3 8—Man also owes God offerings

'Wherein have we robbed Thee? In tithes and offerings"

14 Deuteronomy 16.17—The amount of the offering should be proportionate to God's blessing

"Every man shall give as he is able, according to the blessing of the Lord thy God which He hath given thee"

Note The manner and spirit in which a man pays his tithe shows not only his honesty but it demonstrates his basic love for God

15 Proverbs 3·9—God should be given the first fruits

"Honour the Lord with the firstfruits of all thine increase"

Note If man first presents to God that which is His, then He can bless that which is left in man's hands; but if man takes out his part first, what has he left for God to bless?

16 Luke 6.38—Men will be liberal with one who gives cheerfully and freely.

"Give, and it shall be given unto you; good measure, pressed down, and shaken together, and running over, shall men give into your bosom For with the same measure that ye meet with all it shall be measured to you again"

17 Malachi 3 10—God will pour blessings from heaven upon such a one.

"Prove Me now herewith, saith the Lord of hosts, if I will not open you the windows of heaven and pour you out a blessing, that there shall not be room enough to receive it"

18 Proverbs 3 9—Man should honour God in the manner in which he handles all He entrusts to his care

"Honour the Lord with thy substance"

19 1 Samuel 2 30—God will honour the man who shows deference for Him

"Wherefore the Lord God of Israel saith, Them that honour Me I will honour, and they that despise Me shall be lightly esteemed"

"WE WOULD SEE JESUS"

(Continued from p 33)

ceremonies, but two harsh, merciless wars in one generation have stripped us of our pretences and shorn away our superficialities Today's men and women are saying, "We ask for bread and you give us a stone"

Much of our recent poetry speaks glowingly of finding God in wind swept places, in glorious sunsets, in the loveliness of flowers; but many who live close to the ugliness of earth find these avenues closed to them The human touch is all that seems real to them This is our challenge, yours and mine We cannot sidestep it or transfer responsibility to someone else It may be that I am the only church my neighbour knows As Christ's representative I feel that any seeker after God has a right to come to me and say, "I would see Jesus"

The kingdom of God should be more widespread than it is Some one is holding it back Is it you? Is it I?

"The best part of beauty is that which a picture cannot express"

Francis Bacon

The Oriental Watchman and Herald of

Health

A Magazine for Health and Happiness

...e-Minute Articles

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Fathers

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Contents

June 1955

L J LARSON, M A, B Sc, Editor

DUNBAR SMITH, M.D, D.N.B, D T M & H (LOND) Associate Editor

J B OLIVER, M.D., D T M. Associate Editor

OUR COVER

When people call this beast to mind,
They marvel more and more
At such a LITTLE tail behind,
So LARGE a trunk before
Hilaire Belloc,—*The Elephant*

N Ramakrishna

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Minute Meditations

HAPPY MARRIED LIFE

D. A. Delafield

AMOS ALONZO STAGG, formerly of the University of Chicago, is much loved as a football coach. His knowledge of the popular sport he gave his life to was phenomenal He is also well acquainted with the rules of life—especially happy married life.

On the occasion of his thirty-seventh wedding anniversary he offered some advice on this subject that has real merit. A reporter called at his home to pick up his recipe for wedded bliss. "There are seven ways to be happy through marriage," said the veteran coach. And as he spoke he stood at the kitchen sink helping his wife dry the breakfast dishes. Here are the rules he gave:

1. Play the fifty-fifty game. Help your wife with the dishes, and she will help you with your charts and signals.

2. Apply the rules of good sportsmanship to your married life. And that means following the golden rule.

3 Be mutually unselfish

4. Have mutual confidence. Keep no secrets from each other, and let no jealousy creep in

5. Never complain. Be cheerful.

6 Have children. A family without children is not normal, and the views of one or both of the couple are apt to become warped without them.

7 Work together Find your happiness at home and in your play together. The couple that spends all their lives looking for pleasure won't find it.

We think Mr. Stagg has given us a wonderful formula. We hope you won't think us presumptuous if we add an eighth rule: Let the

(Continued on p. 5.)

The Editor Says

POLIO VACCINE

Since this initial report on the Salk Polio vaccine was received, the world has been distressed to discover that a few of the children who have received inoculations have rapidly developed polio, mainly of the paralytic type While evidence seems to indicate that the majority of these cases have developed from the vaccine produced from one laboratory, caution is being urged pending further investigations concerning the vaccine We believe, however, that in the not too distant future the vaccine will be standardized and safe for use.—L. J. L

It Works

The big news came in three words "The vaccine works"

That was how the University of Michigan started off its terse summary of the verdict on the Salk polio vaccine The reading of the report itself took longer, and the setting in the university's Rackham auditorium was elaborate Under the klieg lights set up for TV and newsreel cameras, surrounded by microphones and 150 reporters, sat the unquestioned hero of the occasion Dr Jonas Edward Salk, 40, the determined, youthful-looking virologist who for five years had battled in his University of Pittsburgh laboratory to lick polio Next to him sat the University of Michigan's Dr Thomas Francis Jr, 54, one of the U O's most eminent epidemiologists, who had been chosen by the National Foundation for Infantile Paralysis to evaluate last year's nationwide tests of the Salk vaccine For an hour and a half, Dr Francis read his report in an even, matter-of-fact tone. The gist

The vaccine is up to 90 per cent effective.

The vaccine causes a minimum of undesirable side effects—all, apparently, minor.

Results were most favourable from the areas where conditions were best for accurate appraisal

Dr Francis stopped when he finished telling what had been done Dr Salk, who rose to a standing ovation from 500 usually undemonstrative scientists, took a peek into the future the vaccine, he suggested, might be made almost 100 per cent effective This does not mean that polio will be suddenly abolished But it could mean that as vaccination becomes universal for children, whole generations will grow up free of the paralysis that has condemned so many to enfeebled limbs or iron lungs Eventually, polio can become as rare as smallpox—which U S doctors now rarely get a chance to identify

The Test

The task of deciding how good the vaccine is, which seems so easy, proved forbiddingly difficult, though Dr Francis had all the help he needed from Michigan's School of Public Health, the U S Public Health Service and even the Bureau of the Census

The test vaccine was given in 127 areas, deliberately picked because they had had a high polio-attack rate for several years This was to make sure that there would be enough cases for the epidemiologists and their statistical machines No fewer than 1,830,000 children were studied in the trials (440,000 were inoculated with the vaccine, 210,000 got a dummy substance, 1,180,000 were merely observed as "controls")

Among these children, there were only 1,013 cases reported as polio (in the U S as a whole there were 39,000 cases in 1954 And the disease is so hard to identify that 150 of the reported cases were thrown out, leaving Dr Francis' staff only 863 confirmed polio cases But from a mountain of data about the cases that did not develop as well as about those that did, Dr Francis' team gathered these principal facts

The Vaccine Is Safe

"Minor reactions," meaning a touch of headache or fever, or soreness at the injection site, were just as common among children who got the dummy shots as among those receiving vaccine, possible "major reactions" such as high fever or severe rash were actually more common among those who got the placebo shots No major reaction could be definitely laid to either substance, the evidence was that all were either coincidental or psychosomatic Most important perhaps no child developed polio as a result of vaccination

It Is Effective

Of those who received vaccine only 57 developed polio Of these only one died Patricia Redick 8 of Tulsa She received her first shot in April, then had her tonsils out, got a second shot in May and died two weeks later In Patricia's case, two things were wrong the vaccinations were too late, because Oklahoma's early polio season had already begun, and it has long been known that a tonsillectomy is dangerous when polio threatens

Proportionately, there were two

and a half times as many polio cases (142) among children who received dummy shots as among those who received real vaccine Still more encouraging statistically, the unvaccinated had three and a half times as many paralytic cases, and there was a kind of protective gradient the more severe the type of paralysis, the greater the difference in incidence between those who got the vaccine and those who did not In other words, the vaccine appears most effective against the worst forms of polio These results were most clear-cut in the eleven states where vaccine was contrasted with placebo, in the 33 states where children received either real vaccine or nothing the results were similar but a bit blurred (Probable reason

(Continued on p 28)

Through Troubled Seas

(Continued from p 3)

married couple and their children spend some time every day in family worship.

Teach the little ones to lisp a prayer to God. Conduct family worship morning and evening. Seek to know the will of God, and pray for strength to do it The law of self-denying love is the law of life for the universe. Practise it in your home, and see how happiness and security follow

June—the month of brides—is upon us. What higher resolve could you make than to gather the family together every day for morning and evening prayers and Bible reading? Make regular family worship a fundamental part of your home life. Tell others what is happening in your home Let the family altar idea spread through your community. Fathers, mothers, and children whose hearts are bound together by the power of earnest prayer and faith in God are the salt of the earth, and may be the means God will use to preserve our tottering world from total destruction

WHAT'S IN THE NEWS?

Finland was the first country to include manual training in its schools This innovation appeared in 1858

* * * *

Saccharin is a chemical compound 300 to 500 times as sweet as ordinary sugar

* * * *

Tapioca is made from the root of the cassava plant, and has two principal uses as a food and as a postage stamp adhesive.

* * * *

The smallest city in the world to be served by a subway is thought to be Oslo, Norway's capital The National Geographic Society reports that the underground begins at the National Theatre but emerges above ground far short of its terminus, 1,500 feet up on the hill of Frongnerseteren

* * * *

The magnetic North Pole is about 1,400 miles from the geographical pole

* * * *

More than eight million lightning strokes strike the earth in an average day

* * * *

Brazil has a water plant that grows leaves up to six feet in diameter and can support weights up to 30 pounds This plant, Victoria Regia, is best known in the state of Amazonas

* * * *

A record 127 2 million head of sheep graze on the pasturelands of Australia This is an increase of 4 1 million over the previous record high of 1942

* * * *

Since an average hive of about 2,000 bees produces some 20 pounds of honey each year, it can be roughly estimated that one bee produces about 1/100th of a pound A bee converts flower nectar to honey in its stomach.

* * * *

Astronomers are now more sure than ever that the planet Mars is alive with some kind of primitive vegetation During the recent near approach of this planet to the earth, there was a six-month astronomical expedition stationed at Bloemfontein, South Africa. A study of the 20,000 new photographs made of earth's neighbour have revealed that Mars is not entirely red but bears great blue-green markings One astrophysicist says, "If things did not grow there, changing with the seasons, dust from the red deserts of Mars would have settled long ago over its entire face" He believes that the primitive forms of plant life must be something like moss or green lichens, for there is very little oxygen and water on Mars and the nights are extremely cold.

* * * *

Bed manufacturers are beginning to realize that people are taller now than they used to be The number of six footers has increased seventy per cent since 1918 In recent years there has been much confusion over odd sized beds, mattresses, springs, sheets, and blankets Now extra-long beds have been standardized and will measure 82½ inches from end to end.

* * * *

Demonstrations in Great Britain have indicated there are possibilities for using television in teaching deaf children

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RAYS for HEALTH

EDNA L THOMPSON, R.N.

Physical Therapist
Washington Sanitarium Electrotherapy Department

Here's how sun baths and sun lamps will help you keep in good health.

MANY years ago men discovered that sunshine produced a sense of well-being and that heat relieved pain Some of the ancients worshipped the sun because of these benefits, believing it was a god. Now we know that the sun gives off its rays in waves The result we call radiant energy These waves differ greatly in length and also in their rate of vibration These differences determine the effect the rays will produce They travel from the sun to the earth at 186,000 miles a second

If you pass a beam of sunlight through a glass prism, you see it split into the colours of the rainbow-- violet, indigo, blue, green, yellow, orange, and red We have all seen the rainbow reflected on the floor by the sun's rays shining through a goldfish bowl, for instance. These rays are light that the eye can see At both ends of the rainbow are the invisible rays Above the violet end are the ultra-violet rays, below the red end are the infra-red rays These ultra-violet, visible, and infra-red rays are used for treatment, or therapeutic, purposes

Natural sunlight is the least expensive source of all these rays, but in some areas it is an unreliable source It is unreliable because many of the beneficial rays are filtered out by water vapour, smoke, dust, and clouds before they reach the earth At higher altitudes, in the mountains, sunlight provides more of the beneficial rays, because there is less dust, smoke, and water vapour Another reason we cannot always depend on the sun for treatment purposes is that the strength and intensity of the radiation varies at different times of the day and at different seasons of the year Also, cold or cloudy weather would prevent regular sun bathing

If you wish to take sun baths indoors, take them with the window open through which the sun passes Ordinary window glass filters out the beneficial ultra-violet rays and lets only the visible and infra-red, or heat, rays come through A simple and inexpensive way to get around this difficulty is to cover an ordinary window screen with moisture-proof cellophane It will keep out the cold and rain but allow the sun's rays to pass through By means of this screen your child may have his sun bath while lying on a blanket in a warm room

Because of the unreliability of the sun's rays for treatment purposes, manufacturers have placed many lamps on the market that will provide artificial light rays. Some of these lamps produce only infra-red rays, others, a combination of infra-red and ultra-violet, with some visible light These are called sun lamps

Infra-red generators are of two kinds luminous and non-luminous The luminous kind is a bulb that gives light as well as heat It produces a more penetrating and soothing heat than the non-luminous generator A 100-watt bulb in a reflector such as a goose neck lamp is a good substitute The only drawback is that its bright light may be unpleasant to the eyes

The infra-red rays emitted by the non-luminous generator are invisible These rays make heat but not light *A common example of a* non-luminous generator is the round electric room heater, the heating unit of which is a coil of wire wrapped around a cone

Therapeutic lamps also have a cone, or core, that acts as a heating unit Because all these appliances give the same kind of heat, your household heater may act as a substitute These non-luminous infra-red heaters give only a surface heating of the skin, which is not so penetrating as the heating given by the luminous type This surface heat is not deep enough to be carried away by the blood stream,

and therefore there is more danger of burning the skin Also, this type of heat is irritating or stimulating rather than soothing

Your infra-red heat lamp may be a valuable aid in home treatments Use it when your doctor orders local applications of heat for Grandmother's stiff and painful knee little Johnny's chest cold, your sinus trouble, or the sore and aching muscles in your back that have bothered you since you worked in your garden The soothing heat rays improve the circulation of the blood, relieve congestion, and relax muscles You will be amazed at the improvement you feel after such treatments They stimulate the body's defences Your body indeed is its own best healer

Be very careful that the lamp is placed at a comfortable distance from the skin and does not cause over-heating and blistering Do not leave a child or elderly person alone while the lamp is on Do not leave any patient alone during a light-ray treatment The rays may relax him and send him off to sleep, and he may become painfully over-exposed You must remain alert for the welfare of the patient

If the patient cannot tell you when it is too warm, be sure to observe the skin for too much redness A distance of two feet from the skin is usually safe

The length of treatment may be twenty to forty-five minutes, depending on the purpose Use special caution with very young children and very old persons Their heat tolerance is low A burn may be produced more easily where there is a scar, in skin lacking normal sensation, and in sensitive skin There may be over-heating where circulation is poor, because the blood does not readily carry away the excess heat A person with heart trouble or diabetes should be given only mild heat treatments with great care

At the end of the treatment rub the skin quickly with a little

Here is a lamp that produces the infra-red rays that are used for treatment or therapeutic purposes

alcohol, and cover the patient warmly Keep him quiet in bed for at least a half hour to avoid chilling Immediately after a treatment the patient is vulnerable to cold, and must not be exposed

Infra-red rays produce the effects of heat Ultra-violet rays produce chemical action Either of these rays must be absorbed by the skin before it can produce any effects or changes in the body Ultra-violet does not penetrate as deeply as infra-red Its effects are produced only in the skin, but they may be carried through the blood stream to give effects in the whole body

Infra-red causes the skin to become pink immediately, and the patient feels the warmth at once The effects of ultra-violet cannot be seen or felt until several hours after exposure For this reason we cannot depend on sensation in ultra-violet dosage Exposures must be timed accurately This caution is very important, for in over-exposure ultra-violet can be dangerous

There are various lamps on the market for home use Not all have the same strength and efficiency Therefore you should carefully study and closely follow the instructions supplied with your lamp If the instructions are missing, do not use the lamp until you obtain

(Continued on p 20)

Check That Chronic Cough

JOSEPH D. WASSERSUG, M.D

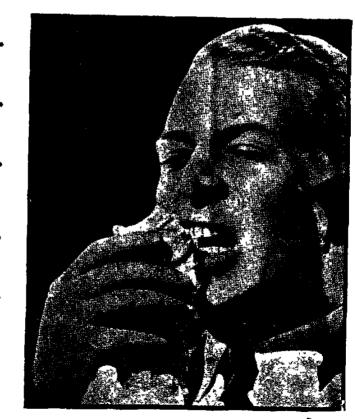
Don't let a cough become a familiar old friend. It's an enemy in disguise!

NO ONE with a chronic cough ever takes his coughing seriously He is likely to neglect it or even joke about it. Some patients even refer to their cough as a pet cough. Most patients who come into the doctor's office with a chronic cough believe that their condition is nothing more than a "cigarette cough," "postnasal drip," or the result of a "chronical bronikal condition"

Take John S, a forty-eight-year-old draftsman at a local factory John has had a cough for as long as he can remember. When he was just a little under three, he had a case of whooping cough so severe that he nearly died This left him with "weakened lungs," and at seven and again at twelve he had pneumonia From that time on, he has had a cough It is worse in the morning, and is usually accompanied by a moderate amount of phlegm Even though he doesn't enjoy his cough he is used to it, it has been with him so long

Last February, John came home from the factory chilled and feverish with what appeared to be a bad cold He felt so sick that his wife put him to bed with a hot-water bottle at his feet and gave him a hot drink She became alarmed when she noticed that the sputum he was raising was tinged with blood She checked his temperature, found it to be 103, and immediately called the doctor

The doctor's examination showed that John had pneumonia, mostly in the right lung He gave John treatment at once He came to his home several times in the next few weeks for additional treatments Soon John was back on his feet, feeling as well as ever But the doctor was not satisfied Patients do not ordinarily have repeated bouts with pneumonia unless there is something wrong with their lungs He advised John to have an X-ray examination of his chest

The X-ray report disclosed some thickening of the bronchial tubes at the bottom of the right lung and in the middle of the left lung Such a finding is often suggestive of a condition called bronchiectasis To prove this diagnosis, the doctor made additional X-ray examinations These examinations con-

If you have a chronic cough the best thing to do is to have a thorough examination carried out by a competent physician.

firmed the diagnosis. For forty-odd years John had been suffering from bronchiectasis Actually, his pet cough was no pet but a real menace to his health.

In bronchiectasis, a common cause for chronic cough, the bronchial tubes are dilated so that pus and secretions accumulate within them, interfering with the normal drainage of the lung Just as malaria parasites grow in stagnant pools so do vicious germs grow and multiply in stagnant lung secretions That is why John had repeated bouts of pneumonia over his lifetime

In some cases the physician will encourage his patient to lie with his head far off the bed, and his body tilted forward, so as to allow the lung secretions to drain out and be coughed up John was placed on some such programme as this, including restorative treatment, and is well today The diseased portion of the lungs sometimes may be removed, and the patient helped

Bronchiectasis is a common cause of chronic cough, but it is not the only cause Consider Helen L. She is a twenty-six-year-old saleswoman in a large department store Helen had been smoking excessively—a pack and a half or two packs of cigarettes a day—so it was easy for her to believe that the cough she had had for a year was simply a cigarette cough Also she had been losing weight (eighteen pounds in six months), but she attributed this loss to the fact that she had just broken her engagement Her mother had died of tuberculosis, but that didn't worry her because three years ago she had had an X-ray of her chest and it did not reveal any evidence of tuberculosis

What bothered Helen was that she was always tired Even after a good night's sleep, she was not rested

Except for weight loss and chronic cough, the doctor's examination was not too revealing The lungs appeared to be clear, but the physician was suspicious Because of the family history of tuberculosis, he ordered X-ray examination Helen could not understand the reason for this, and told her doctor she had had X-rays three years before

X-ray helps greatly in discovering the cause of that chronic cough

The X-ray revealed a small shadow in the upper part of the left lung, indicative of tuberculosis The physician made a sputum examination, and found a few tuberculosis germs.

Helen burst into tears "I suppose I will have to go away to a sanatorium and stay there for years and years," she said "Isn't there any way for me to take treatment at home, doctor?"

"Surely," said her doctor "With modern methods of treatment, many patients get better at home" He told Helen that because her case was discovered early she could receive treatment at home Home treatment usually brings about a 95 per cent recovery rate. Frequent X-ray examinations and sputum tests are necessary, however, to check on progress "The first thing you will need is plenty of rest, so you must stop working," he said "You will need a good diet, including plenty of vitamins I will have the visiting nurse come in if you need her."

Helen was a good patient, and remained quiet in bed according to her doctor's orders As the weeks turned into months, her chronic cough disappeared, and she regained her weight and strength A little more than a year

(Continued on p. 21)

The Underweight Problem

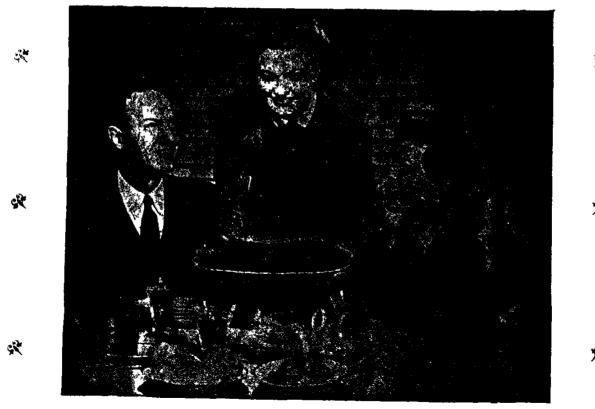
EVELYN WINIFRED FOX, R.N

IF YOU are more than ordinarily thin, and cannot gain weight, you will understand the "underweight problem." I once knew a thirty-year-old mother whose normal weight should have been about 125 pounds. But try as she would, she could not increase her weight much over a hundred pounds. No matter what she ate, she burned up her food so fast that it had no chance to build fat or muscle for filling out her figure. Her main complaint was that her clothes just hung on her. She would have given anything to fill out chest and hips, and to have a well-rounded figure.

She had a complete physical examination, and her physician did not find any outstanding evidences of disease. There was no organic cause for her condition, such as diabetes, or tuberculosis, which often cause patients to lose weight. The doctor took a chest X-ray to make sure, and her chest was clear.

Because her physical record was free of disease, she no doubt fell into the large group of underweight persons who are on the nervous side. Young mothers especially find that because of the heavy duties of housework, child care, keeping up with their husbands' activities, and making the home budget stretch its full limit, there is no time for relaxed eating. When they eat under tension, their food is not fully absorbed.

That was the life this young woman lived, for she had two children, both under five years of age. Her husband led quite a heavy social life, which meant that she had to do a great deal of entertaining and be in the public eye several evenings a week.

Although she fitted this nervous-stomach type of person, who does

Acme News Pictures
In order for your food to supply you with the greatest benefit, it must be served in pleasant surroundings, free from nervous strain or tension.

not absorb his food readily and consequently cannot become fat, there is also a possibility that she might also have been in that larger group who are constitutionally thin

There are three types of persons in the world Doctors have given long names to them, but they are easy to describe The first type we will call the endomorphs These are the jolly over-weight folks They absorb their food extra well, and it seems that everything they eat goes to fat

And then there's the mesomorph The person with this type of body build is the muscle man He has more muscle than bone or fat His is a normal type of body build, and he is the athletic, well-built businessman, who is more prone to develop a peptic ulcer than gain too much weight

Then we have the under-weight group, called ectomorphs They are the skin-and-nerve people They are highly nervous, thin, perhaps a little introverted, and can't gain weight no matter how hard they try

You may wonder whether it is possible for a person to change his body build from ectomorph to mesomorph or endomorph That is, can a skinny person become a muscle man or a fat man? It is possible, but not very probable When we are born we have certain inherited bodily make-ups If a man's father or mother was a tall, thin person, the chances are he will follow that family trait On the other hand, people need not think that just because their father or mother had a tendency toward underweight, tuberculosis, or any other malady they must follow suit If a person has a tendency to underweight, he ought to do everything in his power to correct it, not simply say, "Well, my father was underweight, so I guess I'll be a skinny rail too"

What is dangerous underweight? If a person is, say, only 10 per cent underweight, he has a weight that is almost ideal for persons over fifty Any 20 per cent or more below his ideal weight is considered underweight Pronounced underweight is not desirable in young people who are still growing, in fact, it may be a symptom of disease Glandular disorders, often wrongly blamed for overweight, are much more likely to account for a weight loss or inability to gain.

Even when they are not ill, people whose weight is too far below normal are more likely to suffer from fatigue and poor physical endurance Resistance to infection is often lowered in the underweight person Tuberculosis, for example, strikes more often among adolescents and young people who are underweight than it does among those whose weight is closer to what it should be

Some of the more common causes of underweight besides the constitutional, hereditary type are certain diseases and glandular disorders In healthy people, however, underweight comes from eating too little, from poor eating habits such

as eating too fast and under nervous strain, from over-activity or too little rest, and from worry or prolonged nervous tension

Many people eat too little for much the same reasons that the fat folks eat too much Habit frequently plays a part In some families meals are irregular, sometimes poorly prepared, and eating is considered the least important of the day's activities It is not surprising to find the children growing up with an indifferent attitude toward food The natural consequence is that they soon become run down, develop a vitamin deficiency, and feel worn out

Emotions may also play a part in weight loss A feeling of being unloved and unwanted, especially in children, is a big factor in whether they enjoy their food and get the maximum absorption of their food to make strong bodies Dissatisfaction with wife or husband and an upset home life can also cause weight loss

In this category would fall also the chap who is thin because he is upset over his job He doesn't like his boss, or he doesn't enjoy his work Worry over money matters can soon take pounds off a man, to say nothing of heavy social obligations and too many nights out during the week Every businessman knows that in order to lose weight all he has to do is spend

(Continued on p 24)

Can't gain weight? You will have to do the reverse of the man who wants to lose.

IS BABY ALL RIGHT?

"A living jewel dropped unstained from heaven"

"OH BRENDA, come in I am glad to see you" And wasn't I? My sister, Brenda, is a trained nurse at a hospital, and I'm always turning to her for advice I know it's silly to get so worried, but he's my first baby, and I know nothing whatever about managing babies, and every time he does something he's never done before, I think he's ill

"Why, Phyllis," said my sister, "you look almost haggard! Whatever is the matter?"

"Oh, it's the baby as usual," I replied "As a matter of fact I feel better already just for seeing you You know how Mother always upsets me"

"You shouldn't listen to her, not when she frightens you about the baby"

"Um! Mother's never forgiven me for taking him off the breast and putting him onto powdered milk"

"I must say it is since I've had him on the bottle, that he's really had me worried First it was constipation and now this"

"Well, what is the matter?" asked my sister

"Oh, everything," I replied "Well for a start he keeps vomiting all the time Then there's this rash on his forehead And then he's not gaining as much as he was Oh, and he's still constipated"

"Is that all?" laughed Brenda "Well, let's look at him"

"Hullo, Sweetie!" she cried, picking him up out of his cot, and swinging him up and down "I must say he looks pretty fit Yes, I know the rash spoils his looks a bit, but it's not a sickness rash Just his way of saying he doesn't like the new milk you're giving him It will go gradually as he gets used to the milk If it doesn't go in a fortnight you can start worrying about it"

"Oh, well," I said, "if that's all I thought he was getting measles"

"Silly girl Can't you see he's well, not ill?"

"Yes, I suppose so," I agreed "What about the vomiting?"

"How much does he bring up each time?" asked Brenda

"About a tablespoonful," I said "Sometimes more He seems to gulp his bottle"

"I expect he does," said my sister "Let's see the teat Yes, there you are, the hole is too big You get a new teat Make him drink slowly, and get his wind up properly Are you using full cream milk?"

"Yes, of course," I said indignantly "He must have the best"

"Well," said Brenda decidedly "you give him a week on half-cream, sweetened milk, till he's got used to his bottle Then change over to full cream milk little by little He's not used to all the rich cream But he'll soon learn Now do you feel happier about him?"

"Oh, yes," I said "I knew you would sort out my worries"

"Well, just look at him," said Brenda "You can see he's not ill You will be, my dear, if you don't stop worrying about him"

—*T J Smith & Nephew Hull*

QUESTIONS

YOU ASK YOUR DENTIST

Here are answers to the questions you have when you go to the dentist's office

ALBERT C KOPPEL, D.D.S.

1 Will this hurt?

Much of the aversion people have to dentistry may be termed anticipated pain Because of previously heard dreadful stories, people in the dentist's chair fear that some dreadful, sudden stab of pain will strike them in the ever-present "next moment" But it doesn't

Today your dentist is prepared to do the necessary dental restorations while you are at ease He has anæsthetics to rub on your gums before he gives you the local anæsthetic, which will alleviate even the minor discomfort of the injection If you are nervous about your appointment, he is prepared to give you a pill that will put you at ease In some instances it is even possible by means of general anæsthesia to do the necessary dental work without the patient's being conscious of it at all

2. How many fillings do I need?

It takes a little time for a dentist to tell how many fillings you need In order to be absolutely sure that there are no cavities between the teeth, no abscessed teeth, and no other hidden condition, your dentist should take a full mouth-X-ray After studying the X-rays, he will make a thorough examination

But even when he tells you how many cavities you have, he has not told you the full story One person may have five small cavities and another person may have five cavities so large as to require extensive removal of decay, requiring much more restoration with different kinds of material

3. How much do you charge for fillings?

Suppose you asked a contractor how much he would charge to repair a house In turn he would ask, "What is wrong with the house? How large is it, and what kind of material do you wish me to use in the repair?"

Your dentist may ask you these same questions He has only his time to offer you as a service

People are frequently annoyed because they pay what they consider to be a large sum for, let us say, a gold inlay, and then a number of years later, when the tooth is lost, they are not repaid for the gold at a figure near the amount they paid for the inlay in the beginning The reason the cost of gold restorations is more than for some other types of restorations is not that the amount of gold used is so very expensive, but rather that there is much more time and patience needed in the construction of a gold restoration

4. Doctor, is it necessary to have X-rays?

Yes, it is best to have a thorough, full-mouth X-ray examination It is true that a dentist may check up on your teeth and find a great many of the dental defects But often when he does only a direct examination, there will be cavities and decay that the naked eye cannot see With the X-ray he discovers these cavities.

Also, by means of X-ray the dentist is permitted to view the roots of the teeth to determine

whether there are any abscesses or loss of supporting bone.

5 What tooth paste do you recommend?

Tooth paste has a good flavour, and it gives the mouth a feeling of refreshment Although there is some soapy action by means of the tooth paste, the main benefit in cleansing the teeth is from the physical action of the tooth-brush as it removes the food particles from the teeth

Recent investigations in the dentist's office have emphasized the importance of brushing the teeth immediately after eating

Most dentifrices contain flavours and soap or synthetic detergents The powders and pastes contain abrasives Dentifrices are usually sweetened with saccharine or other non-sugar sweetners, but a few contain sugar.

The American Dental Association Council on Therapeutics does not classify ordinary cleansing dentifrices, but it is continually examining claims made for various substances in preventing tooth decay or gum disorders Up to the present, the evidence is so limited, inconclusive, or otherwise inadequate for some of the outstanding claims that the council does not take a stand as to whether the dentifrices would be effective under normal conditions of use

It has been shown that persons vary markedly in their need for an abrasive in a dentifrice and that at least some of them can maintain their teeth free from stains by the use of a suitable brush and water The advantage of water is complete lack of abrasive

A periodic check-up by your dentist is essential so that any decay may be noticed immediately and taken care of

If only a slight degree of abrasion is necessary to keep teeth from staining, baking soda, or a mixture of baking soda and common salt, finely powdered, is usually satisfactory Dentifrices certainly should be free from harsh abrasives, which can scratch enamel

Tooth brushing can be made more pleasant by the use of an acceptable dentifrice However, there is no adequate evidence at the present time to justify claims that any dentifrice in itself will prevent an appreciable amount of tooth decay Proper tooth brushing is more important than the kind of dentifrice used

6. What kind of tooth-brush do you recommend?

Adults should use a tooth-brush of medium size and with a small head The brush should be small enough to be handled with ease Young children should be given still smaller brushes than those used by adults

A good tooth-brush should have

1 A flat brushing surface

2 Firm bristles

3 A head small enough to permit access to all surfaces of the teeth

Have at least two tooth-brushes, and use them alternately Replace them with new ones when the bristles become soft or loose

Keep your tooth-brushes clean Place them where they will dry quickly, and will not touch other brushes

In order to get the most benefit in preventing tooth decay, brush teeth thoroughly immediately after eating If it is impossible to brush your teeth after eating, rinse your mouth thoroughly with water

(Continued on p 28)

Are You Ready to Live?

HAROLD J HOKIE, M D

IF YOU are prepared to accept the possibility of dying, you can free yourselves of energy-wasting angry turmoil and worry you can enjoy life! You are faced every day with threats to your physical welfare, your financial security, and your reputation. Your enjoyment of life depends on how you meet these threats. Many of them may be trivial, but your intuition tells you that they have sinister possibilities. If you are a sensitive person or have a tendency to worry, you will be unduly disturbed by angry and anxious brooding.

You may feel the effects of these emotions in an inability to concentrate, to think clearly, or to sleep. Or you may feel exhausted, have headache, backache, stomach distress, or the many other physical discomforts resulting from disturbances of bodily function.

The factor that arouses the most intense anxiety in any situation is the *unknown*. It is deeply ingrained in your nature to fear uncertainty.

Here is your clue to a solution for crippling worry. Analyze the situation sufficiently to figure out the worst that can possibly happen. This gives you something solid to think about. You have mentally brushed aside the fear-inspiring unknown. Then you can prepare yourself to accept if necessary this most serious eventuality. This acceptance will free you from your fear, and you can calmly work out a plan to prevent the worst from happening.

Did you ever get an "all gone" feeling when you learned you had to make a speech before a group of people? And didn't you feel better when you told yourself that the worst result of failure would be hurt pride?

Perhaps you have come home from shopping and found that you had ten rupees less than you should have had. You felt sick about it—until you decided to accept the loss. Then you began to relax, and you were able to think more clearly about how you might have lost it and to figure out ways to minimize the loss.

You may have worried over an automobile accident or a failure in your work. You stopped worrying when the affair was settled and you knew the outcome. You could have saved yourself a good deal of mental suffering and lost energy if right after the incident you had figured out and accepted the worst possible consequences. The energy you wasted in worry could have been spent in finding ways and means of reducing your loss from this misfortune.

This principle holds true in the whole life situation as well as in separate occurrences. You no doubt know someone who is well-to-do but can't be satisfied with his riches. He is too anxiously engaged in preserving or adding to his

Are you afraid? Face your problem squarely, there is help for you whatever your dilemma.

wealth His real trouble is that he will not accept the possibility of losing his riches If he could bring himself to be willing to be poor, he could enjoy the security he has

A young man with a family of two small children was told he had a disease with a two-to-one chance of being fatal within two years Naturally he was upset But by mentally accepting the worst possibility and devoting his energies to work he believed was worth while, he was able to reduce his worry and carry on He is still alive ten years later His philosophy of being willing to die enabled him to enjoy living in spite of the continuing threat of his disease

You are ready to enjoy living when you have *faith* When you were a child, you had faith in your parents As you grew older you lost some of that faith And you came to realize that you lacked faith in your own ability to escape from any predicament

You have two choices You can accept the world's standard—of gaining wealth, power, and prestige through your own abilities Or you can put your faith and trust in God, believing that He loves you and knows best what is for your good In place of your ignorance you can accept His wisdom, in place of your weakness His strength

Most likely you have tried to combine these two choices You like the way the world does things It pleases your vanity It gives you a sense of power and importance to contradict your half-realized suspicion that you are weak and inferior On the other hand, you turn to God when the going is rough and you see no way out Then you return to your own way when things clear up But trying to go in opposite directions is bound to cause perplexities, conflicts, and weariness

If you want to get the most out of life and be free of worries and despondency, *trust yourself* with God Then you can confidently accept any eventuality He says to you as He did to Joshua, "Be strong and of a good courage, be not afraid, neither be thou dismayed for the Lord thy God is with thee whithersoever thou goest" With David the psalmist you can say, "I will fear no evil for Thou art with me" And you can remember the words of Paul, "God hath not given us the spirit of fear, but of power, and of love, and of a sound mind"

T S Satyan

In order to get the most out of life and to enjoy living, you must be ready to have faith in your associates and specially in God.

A CONTENTED COLON

J. DEWITT FOX, M.D.

IT WAS a steamy summer day in Calcutta And elbowing his way through the jostling crowd of sweating Bengalees was a little Englishman in a white seersucker suit Suddenly he ducked through a doorway and into the luxurious office of an American insurance broker

"Well, how do you like our office today, Mr Dean?" the broker asked my friend

"It's wonderful," he said "Makes me feel so cool and contented"

R Krishnan

If you would have a contented colon, you must learn to be contented mentally.

"Now, that's just why we've gone to so much expense to make this office comfortable and attractive," the insurance broker said "It's easier to do business with contented people And it increases our own efficiency and good health to be cool and contented"

And, according to the Rev James Cecil Dean who told me of this lovely office one day recently while sitting in my own sweltering Washington office, this insurance broker was in tiptop health, always had a smile on his face, and as you might expect, sold more insurance than any other broker in all Calcutta His secret Keep cool and contented

And on this hot summer afternoon I leaned back in my own swivel chair and began to ponder, What makes people discontented? What can we do to make them happy again? Then as I looked from my third-floor window, and saw rushing people below, many with lines of tension and worry on their faces, all in a hurry, going somewhere, but not too sure just where, the reason for their discontent seemed apparent They had the hurry-worry disease of modern civilization Many of them, no doubt, were carrying clogged colons and sour stomachs because they were discontented with life We hurry and worry in an effort to escape life, its problems, and its realities

If only we could relax, escape to the cool comfort of our own minds, and learn to accept life as it comes, without milling about on the streets, elbowing our way

through the crowds, borrowing troubles from yesterday, worrying anxiously for tomorrow—perhaps our colons would relax. Certainly we would be less constipated. Chemists would sell fewer laxatives.

It is said that nearly fifty per cent of business men suffer from "discontented diseases"—constipation, peptic ulcers, coronary heart disease. What doctors call a chronic irritable colon, or spastic constipation, is one of the most common of these diseases. And as every doctor knows, this cannot be cured with laxatives. The cure lies in a contented mind. So if you would have a contented colon, learn how to be contented mentally. If you would smooth out your bowel problems, you'd better smooth out your mental quirks and worries first.

My patients have been complaining so frequently of tight and irritable colons recently, that I have developed a little formula which I recommended for contenting colons. In case you, too, are interested, here it is:

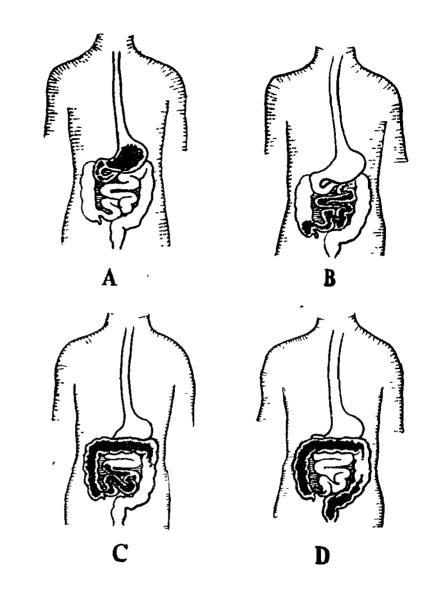
1. *Get extra sleep* at night—eight to ten hours. Retire one hour earlier than usual. Get up half an hour earlier in the morning to give yourself little cushions of time throughout the day.

2. *Drink two glasses of water* first thing in the morning before breakfast, and six to eight more glasses of liquid during the day.

3. *Eat a well-rounded breakfast*: a glass of milk, an egg, whole-wheat toast, cereal, fruit. Eat your meals at regular intervals. Do not skip meals or eat hurriedly.

4. *After breakfast* save a few minutes' time for normal, unhurried bowel action. Hurry here may mean hæmorrhoids later.

5. *Take time for your work*. Take it easy on yourself and others. You'll get through faster and more efficiently if you do.

6. *Take off* a few minutes early or stay at work a little later in order to enjoy a quiet, relaxed walk to the bus or to the train rather than rush through the job in time for the 5.30 sprint to the crowded bus or train.

The above is an illustration of how the food you eat is taken care of in your digestive system.

7. *Take time to exercise* and stretch your muscles each day. This can be done in a short walk, a bit of pottering in your garden, or a game of tennis or golf. Above all, make your exercise a regular routine.

8. *Do not take irritating laxatives* of your own choosing. Let your doctor decide the type of constipation you have, and prescribe the regimen best suited to your colon.

9. *Remember that it's your life* and you can do with it what you will. If you want to rush through it and get it over with in a hurry, that is your privilege. How much wiser to enjoy life as you go along! Remember, you only have today. And it may be later than you think!

10. *Learn to be content* with what you have in life. Ambition is fine. But it can kill you! It's good to work for a better position in life, but don't "knock yourself out" getting there too fast. If you lose your health along the way, you won't enjoy your success when it arrives. Why be a successful failure? Relax and be contented. Keep your colon calm and content,

and you'll do much to hasten your success.

As Rev. Dean, a relaxed **and happy little man,** turned to leave my office on this hot and wilting day, he proved that the best way to relax and enjoy life is to smile.

"Remember, doctor, if you don't wear a smile, you are only half-dressed," he said.

So as we look into the mirror tomorrow morning, checking collar and tie, let's make sure we are fully dressed with a big smile for the world. It will do more than medicine to content our minds to calm our colons.

RAYS FOR HEALTH

(Continued from p. 7)

them from your dealer. They should tell you the recommended distance to place the lamp from the body and the length of time treatment should be given. The time may vary from a few seconds to minutes depending on the strength of the rays produced by your particular lamp. You should start with a very short exposure and gradually increase the time with subsequent exposures. The body will gradually build up a tolerance to the rays and make possible longer exposures without burning.

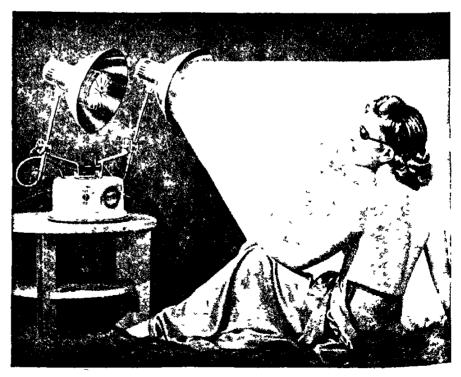
We repeat: Follow the directions carefully when using any type of sun lamp. Over-exposure will cause a reaction that is commonly called sunburn. It can vary from slight redness (which disappears by the next day) to peeling and blistering. If blistering or extreme redness occurs, there will be pain and discomfort.

In some conditions sometimes the doctor will purposely give an exposure to a small area to produce this reaction. When over-exposure occurs unintentionally, the person has a burn and needs treatment. Careful exposure to infra-red given soon after the over-exposure to ultra-violet will help to neutralize the effect and give some relief from the discomfort. The increased circulation of blood produced by the infra-red heat will help to carry away the chemical products causing the reaction.

For this reason, never take a cold shower to relieve the pain of sunburn. Instead, take a hot shower or bath or an infra-red treatment. An application of lanolin or cold cream is soothing. Cold will only make it worse. This fact will help you to understand the importance of following directions. Cold and heat can never be used casually and carelessly.

The eyes should always be protected from the rays by goggles or by a towel over the face. The eyes should be closed. In treating babies and children, the eyes may be protected by someone holding a towel between the head and the part of the body exposed to the light. There is always the possibility that a child may pull off the goggles during treatment. Exposure of the eyes will cause inflammation and pain for a time. They may be sensitive to light for some time afterward. Such symptoms do not appear until several hours after the exposure.

Blondes, red-haired people, babies, diabetics, heart patients and elderly people should be given one fourth to half the exposure time suggested for the average person for the first treatment. Even then, watch them carefully so that you will be able to judge their reactive ability and tolerance. Usually these persons do not tolerate sunlight and artificial light as well as darker-skinned people.

There are many beneficial effects to be obtained from the use of ultra-violet if it is used wisely and cautiously. It can improve the appetite, give a feeling of well-being, increase resistance to colds and infections, and help the skin to form vitamin D, which helps the body to absorb calcium and phosphorus. (These minerals are necessary to build strong bones, especially in children with rickets and soft bones.) The colour and

If you get the correct kind of lamp you can have your ray treatments at hom

tone of the skin are improved, and there is an increase in the hæmoglobin and red and white blood cell count. Ultra-violet is able to kill germs and stimulate healing

Most light skinned persons develop a tan after several treatments with ultra-violet Tanning is the shield the body produces to protect the body against excessive exposure It is not helpful in itself, but forms a barrier against the very rays that are beneficial if not too severe Persons with dark skins are more subject to such diseases as tuberculosis—their bodies deflect the healing rays They require much more exposure to the rays to gain the benefits

Learn these rules and precautions They will assure you of a helpful but safe treatment for your patient

1 Self-treatment is unsafe Your doctor is the proper one to advise you

2 When home treatments are advised, follow instructions accurately and carefully

3 Study, understand, and learn the instructions for the use of the lamp you buy!

4 Do not use the lamp while alone in the house You may go to sleep and be burned

5 Time the exposure accurately with your watch or clock It might be well to set the alarm on the clock

6. Always protect the eyes by a covering or by wearing goggles

7 In using ultra-violet be sure the same area is uncovered each time, to avoid exposure of new, untreated areas They have not built up a tolerance

8 Remember that natural sunlight can cause a serious burn or make you ill if over-exposed Do not fall asleep on the beach

9 Children, elderly people, red-haired people, blondes, and diabetics are more sensitive to light than the average person

10 Those who have heart trouble should avoid exposure to too much heat

11 It is possible to get a sunburn on a cloudy day Some of the ultra-violet rays penetrate the clouds, though the heat rays do not

Use these priceless gifts from heaven wisely, and they will help you to better health and happiness

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CHECK THAT CHRONIC COUGH

(Continued from p 9)

after the diagnosis of tuberculosis was made Helen was allowed to return to work

Not all patients who have a chronic cough get along as well as Helen did Take Arthur L , a fifty-seven-year-old liquor salesman He first came to see his doctor because of a "cigarette cough" Arthur had smoked at least one package of cigarettes a day for forty years He was used to his cough, and it did not bother him But a few weeks ago when the fellows at the office put on a birthday party for him he had a severe coughing spell that made him feel as if he were choking to death He went to see the doctor the next day

When the doctor questioned Arthur about his cough, he admitted it had been getting worse in the past six weeks He had blamed this on his smoking, and did not seek medical help The doctor's examination of Arthur's chest disclosed abnormal findings in the right lung The doctor ordered X-rays The X-ray specialist called to report to the physician that the X-ray film was indicative of a growth in the right lung The doctor did a bronchoscopy (a test in which the inside of the bronchial tubes actually can be seen), and removed through the bronchoscope bits of tissue for study under the microscope This examination proved the presence of cancer

Arthur was sent to the hospital The next morning he was operated upon, and his entire right lung was removed

Arthur's convalescence was uneventful It took him eight weeks to regain his strength Fortunately for him, the cancer had not spread to the other lung or to other parts of the body He is not too greatly inconvenienced at the loss of a lung He is not short of breath unless he tries to hurry or work too much

If you believe that your cough is due to cigarettes, please make this simple test Stop tobacco for two weeks Don't smoke even one single cigarette or take a single puff during that time If your cough is truly due to smoking at the end of two weeks you should be free from cough If the cough persists at the end of two weeks, even though you have not smoked at all, you should see your doctor immediately

Of course "cigarette cough" is not always due to bronchiectasis, cancer of the lung, or tuberculosis It may also be due to heart disease or bronchitis In a few cases tobacco is the irritating agent Judging from statistics on the subject only one of ten persons who believes he has a cigarette cough really has one It is best to let your doctor decide what *your* cough is due to

HOMEMAKERS' HELPS

RECIPES

Noodle Soup

One pint potato water, 1 pint bean broth, 1 tablespoonful grated onion; 1 oz noodles; ½ teaspoonful Vegex or Marmite; salt to taste

Add the Vegex or Marmite and grated onion to the potato water and bean broth Heat to boiling, then cook the noodles in this broth till they are tender Add salt to taste Instead of the Vegex or Marmite, the soy sauce that is used to flavour chop suey, which can be bought at Chinese restaurants or stores, may be used

Favourite Soup

Three-fourth cup rich cream (sweet or sour); 1 tablespoonful cooking oil; 1 tablespoonful chopped onion; ½ cup chopped carrots; 1½ cups diced potatoes, salt to taste; ½ cup uncooked macaroni; chopped parsley; ½ teaspoonful Vegex or Marmite

Cook the cream down in a skillet with the oil, stirring constantly until the fat and the milk solid separate and the solid turns a golden brown The degree of browning determines the flavour of the soup Add the onion and stir over the fire 1 minute, but do not brown Add 4 cups water, finely chopped carrots, diced potatoes, and salt Cook until vegetables are tender Boil the macaroni in 4 cups of water until done Add the macaroni and water to the soup Add parsley and Vegex or Marmite, and serve

Scalloped Potatoes

Six medium-size potatoes; 2 tablespoonfuls butter; 2 tablespoonfuls flour; 1½ teaspoonfuls salt; 2 cups milk

Peel potatoes and slice medium thin Place in baking dish Melt butter in saucepan over medium heat Add flour Stir until smooth Add salt and milk, stirring constantly until thickened Remove from heat and pour over potatoes Bake in uncovered dish for 1 hour in pre-heated 375° oven If desired ¾ cup cheese may be added to white sauce before removing from heat.

Puffy Rice Omelet

Five eggs (separated); ¼ teaspoonful salt; 1 cup cooked rice; 1 tablespoonful butter.

Beat yolks and whites separately Add salt to yolks and fold in stiffly beaten whites and cooked rice Turn into buttered frying pan Cook over a low flame until the bottom is set and browned Turn over gently and brown other side slightly

Favourite Vegetarian Protein Food

Two cups cooked red dal (cooked rather dry); 2 tablespoonfuls chopped onion, 2 cups mashed potatoes, 2 tablespoonfuls butter; ¼ teaspoonful powdered ginger; ½ teaspoonful powdered cinnamon; 1 cup chopped nuts; ½ cup bread crumbs.

Place the onion and butter in a small pan and saute for a few minutes to soften the onion Mix this with the dal and the mashed potatoes, add the chopped nuts and seasoning Form into cutlets and dip in bread crumbs Brown in a skillet until a light brown and serve with tomato sauce

Tomato Sauce

One medium-sized grated onion, 1 medium-sized grated carrot; 2 tablespoonfuls chopped parsley; ½ cup oil; 2 cups chopped tomatoes; salt to taste.

Boil all together for ten minutes and then force through a sieve. Return to the saucepan and bring to boiling point again Add one tablespoonful of flour previously browned and made smooth in a little water If sauce is boiled down and of the right consistency flour may be omitted While cooking, a little crushed garlic and jeera (cumin) may be added, if so desired

Corn Bread

One cup good corn-meal, 1 cup milk; 2 tablespoonfuls thick cream; ½ cup bread flour, 2 level teaspoonfuls baking powder; 1 small egg; ½ teaspoonful salt; 1 tablespoonful sugar.

Sift corn meal into a bowl and pour milk into it and stir well Add the egg and cream and beat well Add sugar and salt and beat again Lastly sift in the bread flour with the baking powder added Mix thoroughly and pour into a well oiled cake pan or into muffin tins Bake twenty minutes to half an hour in a hot oven

Good Health Cake

Three eggs, ¼ teaspoonful salt; 3 tablespoonfuls shortening, ¾ cup sugar; ¼ teaspoonful banana flavour; ½ teaspoonful lemon flavour; ½ teaspoonful vanilla; ¾ cup flour

Warm the mixing bowl and the eggs Separate the eggs, add the salt to the whites, and beat until very stiff, but not dry Add the yolks one at a time, beating with each Add the shortening gradually with beating Add sugar and flavouring in the same way Fold in flour Butter and flour the pan lightly before baking Bake in slow oven (325° F) for 45 minutes

Baked Date Pudding

Two tablespoonfuls honey, 1½ cups hot milk; ¼ lb chopped dates; 1¼ cups (4 ozs.) stale bread-crumbs; 2 tablespoonfuls coconut.

Dissolve the honey in the milk, combine all ingredients. Turn into greased dish, cover with another dish Bake in moderately hot oven 45 minutes Remove cover for a further 15 minutes to lightly brown top Serves four

KIDDIES' KORNER

MIKE'S LONG WALK

MIKE was in one of his very difficult moods He didn't like this and he didn't like *that* And he didn't want to do anything that anybody else wanted to do Maybe you have heard of little boys or girls who get that way sometimes.

The worst came one afternoon when Daddy said he was planning to take all the family into town Mother was delighted, and so were Mike's brothers and sisters But not Mike He said he didn't want to go He would rather stay at home

You would think that the promise of a twenty-mile ride in a farm waggon behind a team of horses would have made anybody happy, but Mike was just plain cantankerous

For a while he just sat there pouting

"What's the matter?" asked Daddy

"Nothing," snapped Mike

"Something biting you?"

"No."

"Anything you want?"

"*I want to get out and walk*"

"Walk!" cried Daddy "You couldn't *walk* to town"

"Yes, I could," growled Mike "I want to walk"

"Don't be a foolish boy," said Daddy "Cheer up and enjoy yourself"

"Don't want to enjoy myself," said Mike "I want to get out and walk"

Mile after mile the waggon rolled on, but Mike didn't change his tune Over and over he kept muttering, "I want to get out and walk"

At last Daddy decided he could take no more Reining in the horses, he brought the waggon to a halt

"All right, Mike," he said "If you want to walk so badly, you had better do so"

Mike got to his feet at once, climbed out of the waggon, and jumped down onto the road

Daddy started the horses again and the waggon moved slowly on, with Mike following behind, looking not a bit happier now he had got his own way

At first he walked quickly, to keep up with the waggon, but after a while his pace got slower and slower

Gradually the waggon pulled ahead By and by Mike was a hundred yards behind Then two hundred Then a quarter of a mile Then half a mile

When he looked ahead the waggon seemed to be getting smaller and smaller, but he didn't care He was on his own He didn't want to be with the others He would rather walk anyway

Next time he looked he could *scarcely see the waggon at all*

Suddenly he began to feel lonesome Nowhere was there a soul in sight Not even an animal He couldn't see a house or a barn

He looked ahead again The waggon had disappeared!

He was all alone in the world Left behind!

Panic seized him He began to run

"Stop!" he cried "Stop! Stop! Stop!"

But though he ran as fast as his legs would carry him, he couldn't even catch sight of the waggon again

Then he got tired He couldn't run any more He couldn't walk any more So he flung himself down on the ground, buried his face in a pile of dust, and sobbed

How long he stayed like that I don't know But to Mike it seemed ages and ages

Then he heard footsteps Looking up, whom do you suppose he saw? Daddy, of course!

Never in his life had he been so glad to see Daddy's face Daddy had come back for him! Dear Daddy!

"Come on, Son," said Daddy, picking him up in his arms "You must be tired by now How about a ride?"

Mike didn't need a second invitation Eagerly he climbed back into the waggon There was a smile on his face now, and the grumbles were all gone I'm told he wasn't cantankerous again for a long, long time

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DOGGIE LOVE

Arthur S. Maxwell

WE ALL love dogs, don't we? Nice dogs, I mean. I suspect you have been looking at those two lovely little puppies in the picture and wishing and wishing that they would suddenly become real and jump into your arms

I wish they would, for I know they would make you very happy

Dogs can be so friendly and lovable Of course, like most boys and girls, they get into all sorts of mischief, but you can't help loving them just the same

Treated properly, they often become the most loyal of friends

Sometimes, too, they will not only remain faithful to their human masters but also be true to their doggie chums

Which brings me to a very sad story So get out your handkerchiefs You may need them

Some years ago there lived in Liverpool, England, a dog called Chubby and another known as Old Bob They were the best of friends, eating together, playing together, and getting into mischief together If you saw Old Bob alone you could be sure Chubby was not far away They enjoyed each other's company like twin brothers

And then, alas, came a very sad day Poor Chubby became ill and died Old Bob couldn't understand what had happened to him All he knew was that there was no Chubby for him to play with He looked for him everywhere but could not find him He called to him in his own doggie language, but there was no answer

Then he was taken out to the Liverpool Dog Cemetery, where poor Chubby had been buried There was no Chubby for Old Bob to see, but somehow he understood Next day he visited the grave by himself The day after he went there again He could not keep away from the place And every day for three years Old Bob went to that tomb to mourn for his doggie friend For all I know he is going there still keeping his daily watch by Chubby's resting place

I wonder what he thinks about when he's there, and whether he has still little hope that one day, perhaps, he will run into Chubby again round the corner

Poor Old Bob!

Did you ever hear of such faithful doggie love as this?

If you pick up a starving dog and make him prosperous he will not bite you That is the principle difference between a dog and a man —Mark Twain

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THE UNDERWEIGHT PROBLEM

(Continued from p 11)

too many nights at the office and too few evenings at home reading the newspaper and enjoying a good, well-rounded, well-balanced supper

Another reason for this kind of weight loss is seen in some people who react to distress by showing indifference to eating just as others react by over-eating In children a keen rivalry and wish to take part in everything from volleyball to basketball on the school grounds may take a child away from his lunch And, as the child grows older, too great an absorption in school or social activities sometimes causes over-activity and underweight among teen-agers

Here's how you can gain weight The first step is to see a physician and have a thorough physical examination It is important to find and correct anything that may be wrong Underweight is often a symptom of disease or glandular disorder, and efforts to gain weight, so long as this defect persists, will be almost impossible of success, or at least useless until something is done

The same principles apply to gaining weight as to losing it, but in reverse Underweight people must take in more calories than they use, so that there will be some left over to store as fat Will power comes into play in gaining weight just as it does in losing it, particularly for people who do not like many of the essential foods They must learn to say "Yes" to eating enough of the right foods, regardless of their own wishes Just as their fat friends must say "No" to the forbidden extras, the Slim Jims must say "Yes" to the extra-calorie foods

The simplest way to add extra calories is to eat more at each meal—extra bread and butter, second helping of everything But often underweight people have small stomach capacity Because of this, high-calorie foods, which add little or no bulk, are probably easier to take at first than larger quantities These folks should try additions of cream on cereals and in beverages, extra eggs in puddings, salad dressings, mayonnaise French dressings on their salads and malted milks and other high calorie drinks

Just as the fat folks get fat on fat, so the lean folks can put on extra pounds by increasing the fat in their diet So lather the butter on your bread, and use other fats such as shortenings and salad dressings in cooking and seasoning your foods Do not use too much fat, because it may cut your appetite and even be nauseating to you Moderate amounts of well-seasoned fat will go down easily, and add the desired pounds Some of the high-calorie foods should be added to regular meals, not used to replace other foods

Among the high-calorie foods are cream, salad oils, nuts, olives, avocados, and coconut Although you should go easy on highly refined sweets, you may enjoy a limited amount of pie and cake, pastries, and desserts But natural sweets, which contain the vitamins and minerals, are much better In this category would fall honey and natural fruits, such as dates, figs and dried apricots All are high in calories Avocados are very healthful and delicious when served on 100 per cent whole-wheat bread with a little salt and lemon Try this sometime It's really good!

Just as the fat man should increase the amount of work he does to burn up calories, the underweight person should conserve his energies in order to put on weight He should get more rest, be less active, and get more sleep at night Extra sleep and rest for the under-

...ght person will help him to ...n Whatever energy can be ...d during waking hours by ...g instead of walking, sitting ...ead of standing, and relaxing as often as possible will add to the calories saved

A healthy person who decides to gain weight and sticks to his programme of taking in more calories than he needs and spending as few calories as possible in physical activity can be sure that sooner or later his efforts will meet with success

1 This question and answer service is free only to regular subscribers

2 No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases

3 All questions must be addressed to The Doctor Says Correspondence personally with the doctor is not available through this service

4 Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES Answers cannot be expected under ONE MONTH

5 Questions sent in on Post Cards will not receive attention

6 Make questions short and to the point Type them or write them very clearly

7 Questions and answers will be published only if they are of such a nature as to be of general interest and without objection but no name will be published Address The Doctor Says Oriental Watchman and Herald of Health P O Box 35 Poona 1

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BACKACHES: Ques—"I suffer from frequent backaches I get them especially when I walk long distances I am 46 years of age What may I do to stop this?"

Ans—Backaches for a man of your age, after walking long distances is probably due to arthritic changes in the spine This can be determined by an X ray For this type of Arthritis, so-called Osteo Arthritis, the best treatment is rest, with an application of heat to relieve the pain In any type of backache, however, I would advise that you consult a well qualified physician, because backaches may be due to any number of causes, some of which are quite serious

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STAMMERING Ques—"My three-and-a-half year old son has begun stammering since the beginning of this year When talking to children of his own age, or younger than himself he seems all right, but when talking to older ones he finds it very difficult I shall be very grateful for any suggestion that might bring about a cure for my son"

Ans—Stammering in children is due to nervous stress and it is usually outgrown There is no operation or magic drug that will relieve this condition It is important that the child receives sufficient rest periods during the day as well as at night, and that no attention whatever be given to his stammering Ignore it completely and try to train the child to speak slowly Do not let him get overly excited in play He should have some good Multi vitamin preparation such as ABDEC Drops by Abbott, and good nutrition I would suggest that he have a stool examination to see if worms are present Worms in the intestinal tract tend to increase nervousness in children

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CONTINUED THUMB SUCKING Ques.—"I am eleven years old, and suck my thumb. I have done it so long that when I don't have my thumb in my mouth I get pains in my chin Can you suggest something to stop the pain?"

Ans—I am very much interested in your letter, and I want to help you

Your chin is formed by the lower jawbone If you put one hand about your chin while you are sucking your thumb, you will see that the sucking keeps your chin continually working Your chin muscles and the nerves that work them are so much in the habit of this constant movement that it actually hurts them to have to stop and do nothing

There are many children, and older people, too, who find it harder to sit still than to wriggle and twist around Those little chin nerves of yours have become so tense that they cannot relax

In order for you to stop the thumb sucking you must do something to take the place of it If you have some general exercise that will put in action all your muscles, it will help to quiet your chin Do you like to jump rope? Whether you care much about it or not, get a jumping rope, and whenever it seems you can't help but suck your thumb pick up your rope and jump

Jump ten times and rest Then jump again Gradually you'll be able to jump fifteen, twenty-five, maybe fifty times, without stopping Your chin will begin to quiet down after you have kept up this exercise for a few days or a week. Any kind of vigorous exercise such as running or skipping will help See how far you can run without playing out

When you have something interesting to do, it is easier to forget the thumb Children usually suck their thumb when there is nothing interesting going on Ask your mother to get you some vitamin B to take with every meal Eat plenty of fresh fruit and vegetables Drink your milk Eat whole-wheat bread and whole wheat cereal Eat your cereal with fruit instead of sugar

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HIGH BLOOD PRESSURE—TEA AND COFFEE Ques—"In the January issue of HEALTH mention is made that tea and coffee should not be taken I am wondering if cocoa and ovaltine are all right to be taken as beverages? I suffer from high blood pressure"

Ans—While tea, coffee and tobacco should not be taken by one suffering from high blood pressure, there is not so much objection to the taking of cocoa or ovaltine In fact the drug in cocoa is sometimes used as a part of the treatment of hyper tension However hot drinks with meals especially if they contain much sugar are not the best for digestion I presume you are refraining from the use of a high protein diet and table salt in your food One of the most effective drugs in the treatment of hyper tension is *Serpentina Rauwolfia* This is one of the few drugs used by medical practitioners since early days in India and the east, that have proved to have real credit This drug as well as other potent drugs should be used only under the direction of a well-trained physician

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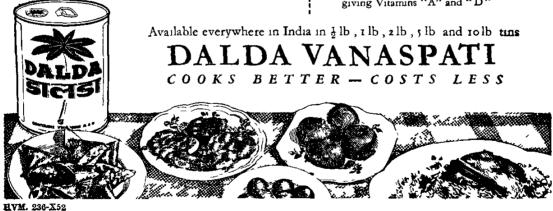
PROPER EATING—TENSION Ques—"Will proper eating help relieve tension?"

Ans—Yes, proper eating will relieve tension When you notice the

tense feeling, take a drink of hot water Take a thermos bottle of hot water to the office, and drink it as needed It is excellent for relaxing one It gives immediate relief, as a rule

Then there are certain foods that will build strong morale, so that tension will not be so likely to develop The two best foods for this purpose are milk and brewers' yeast Any kind of milk, even skimmed milk powder, is beneficial in relieving nervous tension

A plain diet that makes for greatest efficiency will be best Concentrated sweets make adults as well as children peevish and fidgety Rich foods sour the stomach and cause tension Highly seasoned foods surely make one hot-headed and tense

Deep breathing, walking to work, and plenty of sleep are also naturally important There are special bath treatments that are taken with great success.

QUESTIONS YOU ASK YOUR DENTIST

(Continued from p 15)

7. Is it necessary to fill children's baby teeth?

It is very important to fill children's baby teeth Infection and abscesses, which are the end result of decayed teeth, are as unhealthful in a child's mouth as in an adult's mouth

Under the baby teeth are the permanent teeth When the baby teeth are lost at the proper time, the permanent teeth grow into place, filling in the loss soon afterward But when one of these baby teeth is lost because of decay several years before it should be lost, the other teeth move together, closing the space where the baby tooth grew When it is finally time for the permanent tooth to grow into the position, the space is not large enough Then the permanent tooth is pushed to the cheek side or the tongue side.

This wrong growth is the beginning of a large amount of the crookedness seen in the teeth of adults

It is most important that parents see to it that their children's first teeth are given necessary attention

8. Does my child need braces?

Uneven and irregular teeth in the teen-ages are a cause of great concern to parents, and rightly so The appearance of the teeth may have a lasting effect on the personality of a developing young person

The question as to the need for appliances is not so easily answered The dentist may wish to take X-rays of the entire mouth of a child in order to determine the position of the permanent teeth, which have not yet grown out He may wish to take impressions of the mouth and construct a model. It may be desirable to have the consultation of an orthodontist (a dentist who specializes in straightening teeth)

It is very important that the parents seek advice if their children's teeth are crooked, so that the best possible procedure will be followed

9 Do you give gas?

The question as to whether the dentist gives gas is asked because the patient is uneasy about the work to be done, and wants the work done without pain Some dentists give general anæsthetic, and some do not It depends largely on whether the dentist has invested in the necessary equipment and time for post-graduate work, which are essential to qualify him to administer general anæsthetic

10. How often should I have my teeth examined?

After having their mouth rehabilitated, many patients say, "Now I'm fixed up and I won't have any dental worries for a while" Before they realize it, six months, a year, two years, and perhaps even three years have passed One day they are nudged back to the dental office by a toothache, only to find that their negligence has caught up with them, and again they have a number of decayed teeth If they had gone to the dentist regularly, he would have stopped the decay before it could give them pain

You should see your dentist once every six months, and at regular intervals have the aid of the additional eye of X-ray to be sure that your mouth is kept healthy

When you have questions about your mouth or teeth, take them to your dentist without hesitation He is more than ready to help you

POLIO VACCINE

(Continued from p 5)

anxious parents of children who got no shots may have had them inoculated on the side with gamma globulin, which has a short-lived protective effect)

Among the children who were observed for evidence of polio but who got no shots, there were eleven deaths Among children who got placebo shots, there were four deaths

It Is Potent

This quality was measured by the vaccine's ability to raise the bloodstream concentration of antibodies that can defeat an invasion by the polio virus To prove it 27,000 blood samples from 9,000 children, taken before and at intervals after vaccination, were

meticulously studied. (This part of the evaluation programme alone involved highly technical work with 2,000,000 test tubes, took five months) However, no sooner had Dr Francis finished reporting his results than Dr Salk rose last week to confirm newer findings at which he had hinted last fall (Time, Sept 20)

If three shots are given within five weeks, as was done last year, the effectiveness of the vaccine will last for at least a polio season But if two shots are given within a month, and there is then an interval of at least seven months before a third shot is given, two advantages are gained 1) the strength of antibodies is raised more quickly and to a much higher level (higher, often, than would follow a natural infection with polio), and 2) the immunity lasts longer because the system's antibody-manufacturing plant develops an "immunologic memory" or conditioned reflex

It Will Get Better

So far, Dr Salk does not know whether this degree of immunity will last for a lifetime or only a few years He can go back only two and a half years in pointing to test subjects who have enjoyed vaccine-conferred immunity So it may be that all the vaccinated will need booster shots every five or ten years However, this is more a scientific possibility than a probability

In summary, Dr Francis suggested that the vaccine had been 80-90 per cent effective in the placebo-control states and 60-70 per cent effective in observed-control states Most vaccines now in general use against virus diseases are rated 95 per cent effective, but none achieved this in the first year or two of testing

What Is It?

Six big U S pharmaceutical firms* are now producing Salk vaccine or hurrying to get into production The vaccine works on a principle that has already provided protection against such traditional plagues as smallpox and yellow fever When they attack human beings or other mammals, most viruses stimulate the invaded system to manufacture tiny protein particles called antibodies If the system under assault does not have enough of the antibodies, or cannot manufacture them fast enough, the victim may die, or, with polio, suffer permanent crippling

* Cutter Laboratories, Berkeley, Calif , Eli Lilly Co and Pitman-Moore, Indianapolis, Parke, Davis & Co, Detroit, Sharp & Dohme and Wyeth Laboratories, Inc, Philadelphia

Polio virus is unusual in that there are three main types All can cause paralysis, but one type causes more than the others combined Within each type there are many different strains The Salk vaccine is made by taking a representative strain of each type and growing it —till it reaches many times its original strength—in a broth made with snips of monkey kidney (To keep production going, 4,000 monkeys a month are flown in from India and the Philippines) Then the virus in each deadly brew is killed with formaldehyde Strangely, although the virus particles now lose their power to multiply or to cause disease, they keep their power to stimulate a higher animal to produce antibodies Because in the Salk formula the virus types are mixed, the Salk vaccine is really three vaccines in one, effective against all known polio strains.

End of a War

Never before in history had a medical development been big, instantaneous news over a large part of the world Such a momentous item as Fleming's penicillin mouldered for years in musty libraries before laymen heard of it Last week's report on the Salk vaccine was good for banner headlines everywhere, and was covered by the press as massively as the end of a major war—which it was

Ironically, poliomyelitis has always been a relatively uncommon disease with a comparatively low death rate * Polio is actually less of a public-health problem than rheumatic fever and some forms of cancer which single out the young But, largely because of its long-term crippling effects, no disease except cancer has been so widely feared in the last three decades With polio's dramatic defeat, as the Detroit *Free Press* wrote, "The prayers and hopes of millions . in all parts of the world were answered "

* *Polio death rate is 1 per 100,000;* rheumatic heart disease, 13, leukemia, 61

Medals and Movies

President Dwight Eisenhower ordered the State Department to transmit information on the Salk vaccine and its effectiveness to 75 nations through U S Ambassadors, and the World Health Organization planned to duplicate this effort The U S Department of Commerce put an immediate embargo on future shipments of the vaccine, and experts thought that the U S would have little to spare for export before 1957 Actually, relatively few countries have facilities to make the vaccine, only a few areas in the world have a serious polio problem, for clinical polio is a disease that goes with high standards of hygiene and

He was such an unhappy baby! Wasn't gaining weight as he should, always so fretful. It was but natural that the mother was anxious

Then one day, a kind neighbour who had a lovely, bouncing, 'Glaxo' baby herself, recommended 'Glaxo' to this worried mother

'Glaxo' is a pure nourishing milk food to which Vitamin D has been added to build strong bones and teeth, and iron to enrich the blood.

The baby is all smiles now. Has gained steadily in weight, sleeps well, eats well. Yes indeed! He's a *different* baby—a happy, healthy 'Glaxo' baby

For a free copy of The Glaxo Baby Book send 6 annas in stamps to Glaxo' Dept L, Worli, Bombay 18

sanitation Highest recent incidence abroad Canada, New Zealand, Scandinavia

"An American gift to the world" is what the Toronto *Daily Star* called the vaccine, and as far as Dr Jonas E Salk and his colleagues were concerned, it was literally a gift They are not getting a penny from the vaccine's manufacture (the six pharmaceutical firms making the vaccine are selling it at cost to the National Foundation for Infantile Paralysis, but will otherwise sell for normal profit, an average $1 50 per shot) But for Dr Salk, at least, other rewards were multiplying Judges headed by Dr Charles W Mayo picked him to receive $10,000, tax free, and a gold medal awarded by the Mutual of Omaha Insurance Co New York Republican Steven Derounian offered a bill in the House to give "this doctor and humanitarian" a special Congressional Medal Guatemala's President Carlos Castillo Armas bestowed on Salk the country's highest honour, the Order of the Quetzal Norwegian school children collected money for a painting to give him, and three Hollywood movie companies said they wanted to film his life story

—*Time*

The Pivot of Destiny for You and Me

(Continued from p 33)

"The sinner may resist this love, may refuse to be drawn to Christ, but if he does not resist he will be drawn to Jesus a knowledge of the plan of salvation will lead him to the foot of the cross in repentance for his sins, which have caused the sufferings of God's dear Son"—Mrs E G White, ***Steps to Christ*, p 30**

In this was manifested the love of God toward us, because that God sent His only begotten Son into the world, that we might live through Him Herein is love, not that we loved God but that He loved us, and sent His Son to be the propitiation for our sins" 1 John 4 9, 10 In this unspeakable Gift heaven emptied itself for fallen humanity It had no richer treasure to offer And in nailing Him to the cross, mankind showed their scorn for that Gift and their ignorance of its tremendous value But heaven and the Father have not turned from us because of this, much as we merit it Instead, God is trying to bring to our dulled senses and hardened hearts some realization of that Sacrifice His Holy Spirit is constantly seeking to impress us with our need of Heaven's remedy, the blood of Jesus Christ shed on the cross

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Men Who Proved the Bible True—No. 5.

Archaeology and the Exodus

W. L. EMMERSON

IT WAS in the famous Valley of the Tombs of the Kings, opposite modern Luxor, that the great pharaohs of the eighteenth dynasty were buried, and in the neighbouring hills are to be found the tombs of the chief officers of their courts

Here, therefore, we might expect to find records which would corroborate the Bible account of the rigours of Israel's servitude and their eventual escape into the desert Nor are we disappointed

Among the tombs of Abd-el-qurna, near the entrance to the Valley of the Tombs of the Kings, are several belonging to officers of Thutmose III, in whose reign, and that of his son, Amenhotep II, the bondage of Israel reached its culmination

Intef, the "herald" of Thutmose III, tells us that he was the one "who conducts the people to that which they do, who says, 'Let it be done,' and it is done on the instant"

Rekhmere, Vizier of Thutmose III, remarks ominously in his tomb record that his royal master told him to be "bitter" and not "sweet" in the execution of his duties "Let one be afraid of thee," Thutmose told him, for "a prince is a prince of whom one is afraid" That these high officials literally followed this policy is clear enough from the Bible account of Israel's bondage

Rekhmere goes on to mention some of his special responsibilities Among them he had the appointing of "the overseers of hundreds," or the "taskmasters" who exacted grievous toil from the Israelite and other slave labour gangs in Egypt

Elsewhere Rekhmere actually has a picture of Semitic captives at work, fetching clay, moulding bricks, and erecting walls "in order to build" a certain "storehouse anew" Watching over them, just as in the Bible story, are "taskmasters" with canes or whips upraised One is saying, "The rod is in my hand, be not idle" Others are seen measuring the "tale" of bricks made by the slaves

All this fits perfectly into the Bible declaration that the Egyptians "set over" the poor Israelite slaves "task masters to afflict them with their burdens," and to make "their lives bitter with hard bondage, in mortar, and in brick" Ex 1 11, 14

Even the request of Moses for permission for the Israelites to sacrifice to Jehovah is paralleled by the records of one labour overseer who itemizes reasons why workmen absented themselves from work Chief among these was a desire to sacrifice to their gods Evidently this request was often used only as a pretext to alleviate their misery This explains Pharaoh's peremptory refusal on the ground that Moses was seeking to make the Israelite slaves to "rest [or be idle] from their burdens" Ex 5 5

When one studies the plagues of Egypt which resulted eventually in Pharaoh's release of the Israelites, one realizes that they were by no means just arbitrary judgments, but that each one was peculiarly adapted to strike at vulnerable spots in the life and beliefs of the idolatrous Egyptians Every detail of Moses' approach was likewise calculated to impress Pharaoh that he was the representative of a God who was seriously to be reckoned with

When Moses appeared before Pharaoh to demand the release of Israel he had with him Aaron, his "mouth" Ex 4 16 This was a well understood office in Egypt, for many nobles record their appointment as "mouth" to Pharaoh Ahmose, Thutmose III's commander in-chief, claims that he was "mouth of the king" and "chief mouth of his house"

Moses carried in his hand the "rod of God" (Ex 4 20) and Pharaoh soon learned its power when it was pitted against the "holy rod of Amon," the "rod of Hathor," the "rod of Horus," and the rest carried by the priest-magicians

Moses' first use of the "rod of God" upon the waters of the Nile was intended to show that Jehovah was infinitely more powerful than the great god Hapi, who, the Egyptians believed, gave them the waters of the Nile (Ex 7 19-21)

That her life-giving stream should be turned to stinking blood bringing death to all living creatures in it was an insult indeed!

The frog-goddess of childbirth, Heket, was also sacred to the Egyptians When, therefore, the river frogs were miraculously multiplied in the second plague, her powerlessness was revealed, while at the same time, the Egyptians dared not rid themselves of these pests for fear of her future retaliation upon their unborn children

The plague of "lice," or more probably of some stinging insects, revealed that all creatures, great and small, were at the command of Jehovah for the outworking, of His sovereign designs

The fourth plague of flies was, no doubt, a plague of flying scarab beetles, one of the most sacred of insects, representing Khepri, the god of life, virility, and resurrection The scarab, in fact, was the form used for the royal seals and its outline constituted the cartouche in which the royal name was invariably enclosed on the monuments What a shock it must have been to the Egyptians that this sacred insect was turned by Jehovah from a symbol of blessing to a curse upon all the land

The grievous murrain which came upon the cattle of Egypt was a terrible insult to the sacred cow-goddess

Hathor, to whom Amenhotep II was particularly devoted, and when this affliction was passed on by the cattle to the bodies of the Egyptians themselves, the rout of Hathor, as well as Amon and Khnum, protectors of the herds of Egypt, was completed

As the plague of hail lashed the land, the thunders of Jehovah drowned even the great "Voice of Amon" And the plague of locusts covered not only the "face" but the "eye of the earth," that is the sun, which was completely obscured in the ninth plague, the darkness must have struck terror to the priests of the sun god, Ra

The last plague provided the final blow, for in it not only the firstborn of the humblest of the Egyptians was struck down, but also the firstborn son of Pharaoh a "son of god"

No wonder this final fearful judgment completely broke down Pharaoh's obstinate resistance and caused him tremblingly to plead with Moses to take his people away

Tenth Plague Corroborated in Sphinx Temple

A remarkable confirmation of the devastating literalness of the tenth plague was found many years ago upon a large stele or monumental tablet which stands in a little temple between the mighty paws of the Sphinx of Gizeh

On this stele, Thutmose IV, the successor of Amenhotep II, the Pharaoh of the Exodus, relates a dream given to him by the god of the Sphinx, Harmakhis, while he lay sleeping beneath it after an arduous day's hunting Harmakhis told him, what he evidently was not at the time anticipating, that he was to wear "the White crown and the Red crown upon the throne"

This dream would suggest that Thutmose IV was a younger son not expecting to accede to the throne, but that this exaltation came to him as a result of the slaying of Amenhotep's firstborn in the tenth plague

Egypt Abandons Province of Canaan

In the past Bible students have often wondered why if the Egyptian empire in the days of Moses extended from the Nile to the Euphrates, the Israelites were able to settle in the province of Canaan without any protest from Pharaoh The monuments and archives of the later kings of the eighteenth dynasty supply us with a complete answer

It is evident from the vast building projects of Amenhotep III, successor of Thutmose IV, like the majestic temple of Luxor, and his additions to the great temple of Karnak, besides buildings elsewhere throughout Egypt, that this pharaoh was a stay at home monarch, whose interest in the far flung empire was very much less than that of the empire builder, Thutmose III

And when we examine the text of the Tel el Amarna tablets from the archives of his successor, the religious mystic, Akhnaton, we discover that the Syrian provinces were practically abandoned by these pharaohs, thus providentially opening the way for the settlement of Israel in the land long promised to them by God

These Tel el Amarna tablets, came to light in 1887, when an Egyptian woman burrowing among the ruins of the ancient city of Akhetaton, in Middle Egypt accidentally found the Records Office of Akhnaton's capital When deciphered, they proved to be letters written in Babylonian cuneiform from vassal chieftains of Palestine and Syria to their Egyptian overlords Amenhotep III and Akhnaton (Amenhotep IV) In them the chieftains warned of dangerous incursions from the north and from the eastern desert the latter invaders being designated Habiru, which one immediately connects with the biblical Hebrews

Some of the letters definitely recall incidents in the Bible account especially those from Abdi Khiba of Urusalima, whom Lt-Col Conder identified with Adonizedek of Jerusalem Abdi-Khiba first reports that "the country of the king is being destroyed all of it" by Habiru from the "mountains of Seir" or Edom, and warns that "if no troops came this year all the countries of the King my Lord will be utterly destroyed"

No help being forthcoming, he is soon writing again saying, "Let me fly to the king" Still later he reports the abandonment of Jerusalem, a further defeat at Ajalon, and his intention of endeavouring to reach Egypt

Where this correspondence ends the Bible takes up the story and tells how the king of Jerusalem and four other chiefs were caught in a cave at Makkedah and put to death (Joshua 10 15 20)

Well might Conder in his translation of the letters declare "These letters are the most important records ever found in connection with the Bible . and fully confirmed the historical statement of Joshua

Jericho Speaks!

The final evidence for the historicity of the Exodus and the entrance of Israel into Canaan has been provided by the excavations of Professor John Garstang at Jericho

As recently as 1922 Dr Alan Gardner said of the Exodus and the conquest of Canaan "All the story ought to be regarded as no less mythological than the details of creation as recorded in Genesis," and "our first task must be to attempt to interpret these details on the supposition that they are a legend"—*Etudes Champollion*, 1922, page 205

Professor Garstang felt that these suggestions did not do justice to the biblical narrative, and his excavations from 1930-1936 have provided one of the most remarkable vindications of Bible history in the annals of biblical archæology

He found a double wall surrounding the city of Joshua's day with houses built across the two walls, just as is indicated in the description of Rahab's home (Joshua 2 15) The foundations of the walls in many places were found to be noticeably weak and as a result of some catastrophe had collapsed, so that they could quite properly be described as having "fallen flat" Joshua 6 20

The citadel on the west side of the city had held up the walls for some distance on either side and it may have been on this section that Rahab's house stood Actually, this point was nearest to the promontory of Jebel Kuruntul, where the spies doubtless found refuge until it was safe to return across the Jordan to Joshua

Everywhere Professor Garstang found evidences of deliberate destruction by fire "Archæologists," he says, "are familiar with layers of burning, but here the traces are abnormal" The destroyers, he believes must have brought in inflammable material in order to convert the city into a huge bonfire

The further fact that there was no general rebuilding on the site for some five hundred years corroborates the reality of the curse laid upon the city by Joshua (Joshua 6·26, 1 Kings 16 34)

Summing up his findings, Professor Garstang says

"Set side by side with the biblical

(Continued on p 33)

THE PIVOT OF DESTINY FOR YOU AND ME

THOMAS A DAVIS

ALL CHRISTIANITY is centred in a Man But it is more than centred in a man, it is centred in a *Man on a cross.* That cross is the pivot of destiny around which revolves the fate of a universe, a world, and each human soul.

Paul indicated this great truth when he said, "For I determined not to know anything among you, save Jesus Christ, and Him crucified" "God forbid that I should glory, save in the cross of our Lord Jesus Christ" 1 Corinthians 2 2, Galations 6 14

A French artist once painted a picture of the young lad Jesus working with Joseph in their little carpenter shop at Nazareth Mary has just entered to gather some wood chips to start the evening fire Just as she is straightening up with her apron full of chips, she sees Jesus lifting a plank upon the work-bench The westering sun, flooding through the open casement, casts His shadow upon the far wall, and, as though prophetically, she sees the shadow as of One upon a cross

Jesus was born to die The shadow of the cross fell across the manger of Bethlehem Indeed, it cast its grim shadow back across the ages, darkening the idyllic Garden of Eden and beclouding the very streets of heaven For, because of sin, Christ was "the Lamb slain from the foundation of the world"

And as He approached closer and closer to the hour of His terrible humiliation and sacrifice, that shadow began to grow blacker and gloomier across His way The thought of the appalling death He was soon to die weighed Him down, and in great anguish of soul He prayed, 'Now is My soul troubled, and what shall I say? Father, save Me from this hour" But then the thought of His mission came to Him, and what the terrible fate of mankind would be were the bitter cup to be removed So in submission He added, "But for this cause came I unto this hour" John 12 27

And so one day the Son of man carried His cross to the place of suffering, and the mighty Creator and Sustainer of the universe gasped out His life as "the propitiation for our sins"

The lessons we learn from the cross are infinite But two things project themselves above all else the awfulness of sin, with its stupendous price, and the love and mercy of God

The terrible nature of sin can be estimated only by standing before the cross and beholding the frightful death Jesus died Dean Farrar has sought to describe the fearful death by crucifixion

"He [Christ] was stripped naked of all His clothes, and then followed the most awful moment of all He was laid down upon the implement of torture His arms were stretched along the crossbeams, and at the centre of the open palms, the point of a huge iron nail was placed, which by the blow of a mallet, was driven home into the wood Then through either foot another huge nail tore its way through the quivering flesh To prevent the hands and feet being torn away by the weight of the body, which could not 'rest upon nothing but four great wounds,' there was, about the centre of the cross a wooden projection strong enough to support, at least in part, a human body which soon became a weight of agony Then the accursed tree—with its living human burden was slowly heaved up and the end of it fixed firmly in a hole dug deep in the ground The feet were but a little raised above the earth The victim was in full reach of every hand that might choose to strike A death by crucifixion seems to include all that pain and death *can* have of horrible and ghastly—dizziness, cramp, thirst, starvation, sleeplessness, traumatic fever, tetanus, publicity of shame, long continuance of torment, horror of anticipation, mortification of untended wounds—all intensified just up to the point at which they can be endured at all, but all stopping just short of the point which would give to the sufferer the relief of unconsciousness The unnatural position made every movement painful, the lacerated veins and crushed tendons throbbed with incessant anguish, the wounds, inflamed by exposure, gradually gangrened, the arteries—especially of the head and stomach—became swollen and oppressed with surcharged blood, and while each variety of misery went on gradually increasing, there was added to them the intolerable pang of a burning and raging thirst"—*The Life of Christ*, pp 648-650

Such were the last, anguished hours of our Redeemer And added to all that was the most awful pain of all As the Saviour writhed in that final agony, the light of the Father's face was veiled, and He was left comfortless, alone, to be crushed beneath the horror of sin, while from His lips was forced the despairing cry, "My God, My God, why hast Thou forsaken Me?"

Witnessing that terrible sight, hearing that soul-searing cry, how can any insist that God's love is too great, His mercy too boundless, to punish those who reject His grace and turn from His law? Let none thus deceive themselves By Christ's death God showed that so immovable and eternal is His law that not even to save His Son, "His only-begotten Son" could it be set aside And upon those who neglect or reject God's grace and His law shall His vengeance fall, unmixed with mercy

Upon the stone wall of the cell of a prisoner who had just died was found drawn a large cross At the four ends of the intersecting beams was written the word "Love" And the cross does indeed demonstrate the height and depth and breadth of God's omnipresent love Set down in the hard rock of human sinfulness, it towers up into heaven, while encompassing all humanity in its span

Nor is this love passive Speaking of its power, Christ said, "And I, if I be lifted up from the earth, will draw all men unto Me" John 12 32 As a giant electro-magnet draws to itself the iron and steel in its field of attraction, so the eternal, all-pervading love of God, centred in the cross, attracts us and all the dwellers of the universe to Him

(Continued on p 30)

Archæology and the Exodus

(Continued from p 32)

narrative, the material evidence is seen to bear out in every essential detail the record of the capture and destruction of Jericho by the Israelites under Joshua"

So, once again, the "stones" have spoken to refute the hasty conclusions of the destructive critics and to vindicate the trustworthiness of the Word of God

YOU AND THE BOOK-VIII

AN APPOINTMENT YOU CANNOT CANCEL

ALMA L. TIBBS

1 **Matthew 27:50, 51**—By God's appointment the sanctuary service ceased at the cross

> *"Jesus, when He had cried with a loud voice, yielded up the ghost And, behold, the veil of the temple was rent in twain from the top to the bottom"*

Note The temple in which the services were held was destroyed in A D 70 Therefore, after that date, there was no earthly sanctuary

2 **Daniel 8 14**—Daniel was told of a sanctuary to be cleansed

> *"And he said unto me, Unto two thousand and three hundred days, then shall the sanctuary be cleansed"*

Note. This period began in 457 B C, at which date only the heavenly sanctuary existed It ended in A D 1844

3 **1 Timothy 5:24**—By confession sins are today removed from the transgressor to the sanctuary where our High Priest officiates

> *"Some men's sins are opened beforehand, going before to judgment, and some men they follow after"*

4 **Hebrews 9 23**—The heavenly sanctuary is to be cleansed

> *"It was therefore necessary that the patterns of things in the heavens should be purified with these, but the heavenly things themselves with better sacrifices than these"*

5 **Jeremiah 2 22**—Every sin is written in heaven

> *"For though thou wash thee with nitre, and take thee much soap, yet thine iniquity is marked before Me, saith the Lord God"*

6 **Acts 3:19 21**—Just before the second coming of Jesus, the sins of the righteous will be blotted out this will be the cleansing of the heavenly sanctuary—a work of judgment

> *"Repent ye therefore, and be converted, that your sins may be blotted out, when the times of refreshing shall come from the presence of the Lord, and He shall send Jesus Christ, which before was preached unto you whom the heaven must receive until the times of restitution of all things"*

7 **Daniel 7 10**—The judgment is an examination of books

> *"The judgment was set, and the books were opened"*

8 **Revelation 20 12**—Man is judged by the contents of the books

> *"And the dead were judged out of those things which were written in the books, according to their works"*

9 **Ecclesiastes 5 6**—An angel witnesses every word and act—writes them in books

> *"Suffer not thy mouth to cause thy flesh to sin, neither say thou before the angel, that it was an error"*

10 **Philippians 4 3**—The "book of life" is a register of all who have ever entered the service of God

> *"I entreat thee also, true yokefellow, help those women which laboured with me in the gospel, whose names are in the book of life"*

11 **Malachi 3 16**—The "book of remembrance" contains record of every good deed and word

> *"Then they that feared the Lord spake often one to another and the Lord hearkened, and heard it, and a book of remembrance was written before Him for them that feared the Lord, and that thought upon His name"*

12 **Job 13 26**—"Bitter things," or sins, are also recorded

> *"For Thou writest bitter things against me, and makest me to possess the iniquities of my youth"*

13 **1 Samuel 2 3**—Every action is weighed

> *"Talk no more so exceeding proudly, let not arrogancy come out of your mouth, for the Lord is a God of knowledge, and by Him actions are weighed"*

14 **Matthew 12 36**—Each idle word is considered

> *"But I say unto you, That every idle word that men shall speak, they shall give account thereof in the day of judgment"*

15 **1 Corinthians 4 5**—Even the counsels of the heart must be accounted for

> *"The Lord will bring to light the hidden things of darkness, and will make manifest the counsels of the hearts"*

16 **Ecclesiastes 12 14**—Every secret thing will be brought into judgment

> *"For God shall bring every work into judgment, with every secret thing, whether it be good or whether it be evil"*

17 **Romans 2:12, 13**—God's law is the rule by which man will be measured

> *"For as many as have sinned without law shall also perish without law and as many as have sinned in the law shall be judged by the law"*

18 **James 2 10, 12**—Every precept of the law is a part of the divine standard

> *"For whosoever shall keep the whole law, and yet offend in one point, he is guilty of all. So speak ye, and so do, as they that shall be judged by the law of liberty"*

19 **Matthew 5 48**—God requires perfection of His people

> *"Be ye therefore perfect, even as your Father which is in heaven is perfect"*

Note As we consider the lofty standard and the weakness of human nature, the goal seems almost impossible

20 **Philippians 4 13**—Only through Christ can it be attained

> *"I can do all things through Christ which strengtheneth me"*

21 **Hebrews 4 14, 15**—We have a merciful High Priest to plead for us

> *"Seeing then that we have a great High Priest, that is passed into the heavens, Jesus the Son of God, let us hold fast our profession For we have not an High Priest which cannot be touched with the feeling of our infirmities, but was in all points tempted like as we are, yet without sin"*

22 **Hebrews 4 16**—We may confidently appeal to Him and know that He will successfully plead our case

> *"Let us therefore come boldly unto the throne of grace, that we may obtain mercy, and find grace to help in time of need"*

23 **2 Corinthians 5 10**—We cannot escape this experience

> *"For we must all appear before the judgment seat of Christ, that everyone may receive the things done in his body, according to that he hath done"*

24 **1 John 2 1**—Let us secure our Advocate at once

> *"My little children, these things write I unto you, that ye sin not And if any man sin, we have an Advocate with the Father, Jesus Christ the righteous."*

The Oriental Watchman and Herald of

HEALTH

46th YEAR OF PUBLICATION

Contents

July 1955

L. J LARSON, M A , B Sc , Editor

DUNBAR SMITH, M D , D N B , D T M & H (LOND) ASSOCIATE EDITOR

J B OLIVER, M.D., D.T.M. ASSOCIATE EDITOR

OUR COVER

If one advances confidently in the direction of his dreams, and endeavours to live the life which he has imagined, he will meet with a success unexpected in common hours If you have built castles in the air, your work need not be lost, that is where they should be Now put the foundations under them —Henry David Thoreau, "Walden," Ch 18

Photo Mrs S V Lingham

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Minute Meditations

A GOOD DISPOSITION

D. A. Delafield

YOU and your disposition are mixed up in one recipe, like a choice entree.

Your temperament is an integral part of you—the bent of your mind and your general attitude.

How refreshing to meet someone with a steady, pleasant disposition. He has a smile for you whenever you meet him. He takes the difficult situation graciously, leaving you with a warm glow after the smoke has cleared away.

People like that give life its greatest moments. They are a joy to live with, for they bring sunshine into every day and brighten every experience. You find that you are able to take the sad part of life with lifted head because they strengthen you to meet it. They give you courage and the will to win.

Now, don't you want to be like that? Of course you do. Everyone wants to make others happy. And everyone wants to be loved. You'd better start trying right now, for you cannot do it any younger Childhood and youth is the time to balance the disposition. You can change in adult life, but it is harder.

Charlotte Greenwood once said, "Temperament is temper that is too old to spank."

But life will deal with us unless we learn to treat others fairly and happily. Set to work to improve your disposition. Study the following recipe carefully, and you may find just the help you need in shaping a lovable disposition.

D—a dash of DARING,
I—mixed with A KEEN INTEREST IN LIFE as the active ingredient,

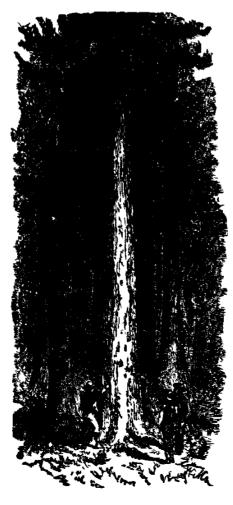
(Continued on p 5)

The Editor Says

THE other day a hard wind blew through that part of Poona in which my home is located. When I returned from the office in the evening, I found that a very fine neem tree had been uprooted. I was distressed by this discovery. Not that I particularly valued that tree, but because it had served as a shield obscuring an unsightly area behind it. That tree had been growing there for many years and had come to be looked upon as something permanent and stable in the beautification scheme of my compound. Now it is gone.

There is a surprisingly small hole in the ground where that tree used to stand and with only a few minutes' work the mali will have it filled up and there will be no sign that a beautiful tree formerly occupied that place. Already there is a competition as to who may have the fallen tree. Its only value now lies in its ability to serve as firewood in someone's stove.

Now, I am disappointed because that tree has fallen down. That tree itself disappointed me. It was a very stately tree. But it had only a very small root system and that was very near the surface of the ground. That neem tree of mine never bothered to send its roots down deep into the earth. It apparently was satisfied with a very shallow superficial root system. Then when the wind blew it could not withstand the tempest and it fell with a crash, wounding and mutilating plants and shrubs in its vicinity.

As I looked at it lying in the debris I thought, "How like that tree are some people!" They grow and develop through childhood and youth into maturity and they have a good appearance. They are

pleasing to behold. They seem to be fine people, but when winds blow—the winds of temptation, the winds of trouble, the winds of perplexity, the winds of doubt—they too fall with a crash and frequently destroy or damage others with whom they have been closely associated.

It is strange too about people and trees. It isn't always what you see on the surface that determines the value of either. That which is even more important is that which is covered up, like the roots under the ground. Even as it takes roots widespread and deeply penetrating into the earth to enable a tree to withstand the blasts of the gale, so it is necessary for the man or woman to have strong principles firmly fixed in a sound character development if they would withstand the pressures of life.

It was interesting about that tree of mine to recall that we have had much stronger winds this year than the one which uprooted it. But, peculiarly, all of the other winds had come from different directions. This was the first time this year that a really hard wind came from this one particular direction and it was this wind that uprooted the tree. Apparently, the tree had been able to withstand all the other gales coming from different directions but there was something in its structure that made it impossible for it to resist this time.

So it is again with people. Temptation after temptation, trial after trial, difficulty after difficulty may come with no apparent effect upon the person. Yet, let a temptation, a trial, or a difficulty of another type come and that person who seemed to be so strong and secure may topple in defeat.

An old Chinese proverb says: "If the roots are deep, no fear that the wind will uproot the tree." Similarly, a person whose nature is controlled by firm principles, who

has sent his own roots down deep into that which is solid and firm and lasting, will prove to be a shelter, a comfort, a source of strength and confidence to all his associates and will be able to withstand the strong winds of adversity

How important it is that boys and girls, young men and young women, should daily strive to develop the right sort of characters, to develop right attitudes and to eliminate from their lives all that which is cheap and worthless so that when the winds blow upon them they may be able to stand noble as a great tree on a hill, strong and gnarled, that may bend its boughs before the storms but will stand firm and secure though the tempests rage

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A Good Disposition

(Continued from p 3)

S—seasoned with A CHEERFUL SMILE,

P—and with PATIENCE added as a preservative

O—stir in the oil of AN OBLIGING SPIRIT,

S—and those lasting ingredients of STAMINA AND STEADFASTNESS as the flour by which life is held together.

I—into this mix an intense purpose to be helpful and A GOOD STEADY INFLUENCE.

T—bake this mixture at a warm temperature until it is TENDER.

I—introduce this tasty entree to your friends along with the important side dishes of INDUSTRY AND INTELLIGENCE.

O—serve this savory dish with a character formed by OBEDIENCE TO GOD'S WILL,

N—and the FRESH AND LASTING NEWNESS OF GOOD WILL AND KINDNESS that is YOU will never fail.

WHAT'S IN THE NEWS

Preliminary studies of the sun's corona have revealed that the red and green rays it produces seem to have a Stop and Go effect on the earth's weather Heavy rains appear to be associated with those periods when areas of intense green ray emission are directly facing the earth When the red emission intensities exceed those of the green then clearer skies seem to prevail

* * * *

Within recent months an American built rocket has reached speeds in the neighbourhood of 5 000 miles per hour and an altitude of some 1 3 million feet—almost 250 miles above the surface of the earth

* * * *

Japan has one of the fastest growing populations Its leaders estimate that it will gain about 6 million people during the next ten years The over all population of the earth is increasing by about 100,000 people a day according to the United Nations, or an increase of some 36 million a year

* * * *

The heart beat of a 14 foot, 2,500 pound beluga whale was recently recorded by Dr Paul Dudley White In his collection he also has the heart beat records for animals that range from a mouse to an elephant The heart beat of the whale was 20 pulsations a minute, that of a mouse 300 Man's heart beat normally is 68 to 72

* * * *

By a study of the amount of triple weight hydrogen in various kinds of water, a University of Chicago chemist has come up with some interesting facts Because of radio activity this triple weight hydrogen, or tritium, decays at such a rate that after about 50 years very little of it remains The chemist, Dr W F Libby, discovered that deep wells often produce water that is more than 50 years old, that rain mixes with the ocean water to a depth of only about 150 feet, and that rain that falls has been aloft as moisture about three weeks on the average

* * * *

A strange tropical fish the black devil, was taken recently off the coast of California at a depth of two thirds of a mile It was the largest specimen of its kind to be collected anywhere in the world, though only five inches long In this species all living adults are females The male, after reaching a length of an inch or so attaches itself to a female, the blood streams of the two merge and the male then loses all identity, becoming a limb of the female The announcement of the find was made by Dr Carl L Hubbs of the University of California's Scripps Institution of Oceanograhy

* * * *

Hawaii produces 70 per cent of the world's processed pineapple

* * * *

Some Woolworth stores are equipped with talking mats When a customer steps on the mat, a sales talk goes into action

* * * *

Geologists say that volcanic gases can be converted into electrical power So the government of El Salvador smallest of the Latin American countries, plans to invest Rs 35 000 000 in test borings in the hope of developing this untapped source of power

* * * *

Norwegian factories produce approximately 50 million matches each working day

* * * *

If you find a bottle with a note in it washed up on the beaches of Lake Huron, it won't be from a ship wrecked sailor or show a map of some lost treasure, suggests the Associated Press The University of Michigan Great Lakes Research Institute has set afloat 500 bottles with postal cards inside in a study of lake currents

* * * *

A relatively new and unusual surgical operation added years to the life of a young San Bernardino, California girl Performed by surgeons at the Loma Linda Sanitarium and Hospital, the "removal of a coarctation," as the operation is called, potentially added 30 years to the life expectancy of Melody Ann Collier, a 12 year old. The coarctation, a constriction of the aorta below the heart, prevented proper blood flow to the lower regions of the body A person with this congenital disorder can expect only about half the life span of a normal individual Surgeons successfully performed the delicate four and a half hour operation in which they removed the hour glass-shaped section of the artery Discovery of the constriction had come during a pre school check up at the hospital

WHAT TO DO FOR SICK JOINTS

JOHN FASSETT EDWARDS, M.D

We'll all have some rheumatism or painful joints before we die, so we'd better learn now how best to treat them

MRS ROCKWELL looked toward the door as Dr Barnard entered her room She appeared to be eminently comfortable and at ease as she lay stretched out on her settee But judged by what she told the physician, this appearance was quite incorrect and misleading

"Dr Barnard, I'm glad to see you Perhaps you are the one person who can appreciate all the agony I'm undergoing My husband thinks it is all in my mind I can't sleep, I can't eat, and I cannot have the things I'd like What on earth have I to live for?"

"Good morning, Mrs Rockwell I shall certainly try to give you something to live for But I shall insist that you follow my directions precisely--to the letter"

The physician seated himself beside the settee and proceeded to ask the customary professional questions as to the patient's feelings how she slept, her appetite, pain, and previous illness

"Mrs Rockwell," he said at last "I find that you have a clear-cut case of rheumatoid arthritis This is a disease that has plagued men through the centuries Your malady is one of the most common and widespread illnesses to be found, surpassing even tuberculosis and heart disease"

"What is the cause of this thing, Dr Barnard? Why does it attack me? Am I a walking laboratory for cruel bacteria?"

"Mrs Rockwell, to a certain extent that may be correct, but we are not certain as to the cause of rheumatoid arthritis"

"I have a suggestion, Dr Barnard This morning my nurse and I were discussing the effect of my diet She rather thought that allergy may be a contributing cause of these painful joints Look at my hand"

"Shall we discuss your hand later? Let's dispose of this allergy matter I have no reason for thinking that your disease is due in any part to an allergy Let's consider your trouble as we find it today What was the first abnormal thing you noticed in this present sickness?"

"I lost all my energy, became just good for nothing Before this illness I was rather noted for having plenty of mental and bodily vigour-- always active in all sorts of things When I became ill I

Swollen, painful fingers with enlarged, tender joints, and tense, shiny skin are typical of rheumatoid arthritis

folded up, lost all strength, wanted to idle around and do nothing, not even read, nursing tingling pains in my legs and arms Sometimes the pain left me entirely, and I felt quite well again But apparently my trouble is very changeable, because it always comes back, even worse than before"

Dr Barnard examined the chart kept by Mrs Rockwell's nurse Quickly his practiced eye absorbed its contents "So you are having trouble sleeping, Mrs Rockwell But your appetite is not bad Try to eat plenty of fruit Avoid all sweets or chocolate, and eat very little sugar or sweet foods We must not cut your diet too sharply, we want to keep up your strength I'll go into this dietary matter with your nurse at more length before I leave

"Mrs Rockwell, have any of your family ever had this joint condition or anything like it?"

"Oh, yes, Dr Barnard, Aunt Celeste was a wreck from it She sat in a wheel chair for twenty-one years Her hands were so crippled she couldn't comb her hair or feed herself, and her knees were so stiff she couldn't walk"

"I'm not astonished to hear that, Mrs Rockwell Most joint diseases run in families Perhaps the disease you now have has come down to you from your ancestors They lived in a cold climate, as you do Incidentally, rheumatoid arthritis very rarely occurs in the tropics But living in a warm climate is not a cure once this disease is well established

"However, if you were to go to the South, where it's sunny and dry very likely you'd feel much better Shall we consider that someday? I know of several delightful places where you could while away sunny hours, and perhaps get relief from your pain May I see your hands again?" Dr Barnard gently took her left hand, rested it in his steady palm and carefully studied it "This is quite typical Your swollen, painful fingers with enlarged, tender joints, the tense, shiny skin, this thumb trying to bury itself in your palm, and the slow course of the illness are all quite typical"

Hot water is of value in the treatment of rheumatoid arthritis

"Dr Barnard, would it be right for the nurse to use hot water on my hands? I have an idea that heat might be of help to stop the aching I don't like those sedative drugs you physicians use so much They make me feel decidedly uncomfortable and confused"

"Hot water is of value, Mrs Rockwell Cold would make the joints worse Your electric pad may be of considerable use now"

"Do you think I'm going to have deformed joints, like Auntie's?"

"I can't say in the short time I've had to study you Joints often do become deformed, despite everything we can do Your nurse will keep a sharp lookout for any hint of deformity, so that you may be properly splinted if any deformity seems inevitable If the elbow that is troubling you is going to become stiff—beyond anything we can do to prevent it—we must see that the arm is put at a right angle, so that when it does finally stiffen it will be in the best possible form for future use As you see,

(Continued on p 28)

Beauty and Health In A Bath

KATHRYN J. NELSON, R.N., M.A

For natural loveliness and health here's what your bath can do for you

BATHING does more than wash away dirt It is good medicine, for it is one of the most important remedial procedures of modern times. In order to make bathing good medicine, the home nurse must learn to give a bath skilfully to get the best effect To appreciate this effect she must intelligently understand how the application of water to the outside of the body sends the blood tingling through the capillaries, suffuses the body with the pink glow of health, quiets and soothes irritable, rasping nerves, and relieves inflammation or congestion

Daily bathing in water of temperature suited to the individual is one of the most effective means of preventing disease Unless the physician orders otherwise, it is one of the best health-restoring measures for the sick one In healthy persons the good effect of the bath is increased by moderate exercise before and after bathing

The skin, an important organ of elimination, has such vital work to do that it is often called another lung

It is a well-known fact that if the skin is coated so that air cannot reach it, a person can live only a few hours Once a child, who represented a gilded cherub in a Roman celebration, was painted with gold She was a victim of ignorance She died be-

Daily bathing in water of temperature suited to the individual is one of the most effective means of preventing disease

cause her friends did not understand the nature of the skin

Many persons are more susceptible to disease and many die because the skin is not kept functioning at the highest point of efficiency The 2,400,000 pores of the skin are clogged when waste products are not eliminated through perspiration, or when the blood vessels fail to do their good work of purifying

In one day the skin throws off about two pints of moisture Many impurities leave the body with this perspiration, and they remain on the surface after the moisture has evaporated The sweat glands rid the body of some of the poisonous products of oxidation From the standpoint of personal attractiveness alone it is important to have a daily bath If the bath were only for the sake of cleanliness, the man who does hard physical labour should bathe more often than the man who works quietly in an office or a laboratory, but both need the benefits of cleanliness

To cleanse the body is not the only reason for the hot soap wash It not only removes dirt and oil from the pores but also dilates the surface blood vessels, and thus draws more blood to the skin This new surge of blood stimulates the sweat glands to greater activity

The surface blood vessels with their contracting and dilating action have been called the skin heart If the blood vessels fail to do their part well in this powerful pumping of lifeblood to all portions of the body, especially when the system is invaded by disease germs, added work is thrown upon the heart This extra burden often makes it appear that the heart is at fault, when it is only reacting from the effort of taking on work that rightfully belongs to another organ of the body

Blood vessels are all under control of the nervous system If the nerves are damaged to the point that they lose this control, and do not pass on to the blood vessels the power of contraction, they remain filled with blood Only the force of the heartbeat works to send it on its way A prolonged application of heat not interrupted or followed by friction or cold will produce the same depressed effect

We call this lack of response to treatment a failure to react After a cold treatment we have evidence of this lack of reaction in shivering, chattering of the teeth, blueness of the lips, shrinking from cold, or persistent goose flesh

This principle of the relaxing and contracting of blood vessels is called on to relieve congestion in any body part Anything that tends to stimulate circulation in a sluggish area, and thus equalize the blood flow to all parts of the body, increase the activity of the surface blood vessels, and remove the accumulation of dirt from the skin, acts to relieve an inflamed, congested area The cleansing bath, the hot bath, the cold bath, and the sponge bath given properly at the right time, in the right way, and in the right place may relieve congestion

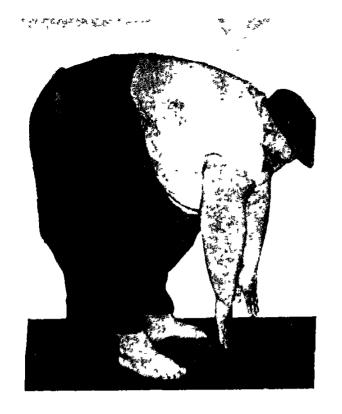
Indoor living and lack of exercise, fresh air, and sunlight produce an unhealthful condition We must use artificial means to undo the damage The effect of regular bathing on the circulatory and nervous system is the best antidote for modern sedentary living

The healthy person takes the cleansing bath in a tub or shower, but it can be given easily to a helpless invalid When properly given, this bath not only refreshes the patient but has a restorative effect on him

In giving a cleansing bed bath, certain cautions are of the greatest importance The room must be warm, at 80° to 85° F Carefully avoid all drafts Have every article necessary in the giving of the bath ready before you start This includes two bath blankets (any warm covering not needed for other immediate use), one face towel, two Turkish towels, two wash-cloths, soap, rubbing alcohol, two basins (one with water about 115° F, the other, cool water), talcum powder, a clean gown, and clean bed linen Warm every article before allowing it to come in contact with the patient

Expose only a small portion being bathed, washing and drying each part A suggestive order is arms, chest, abdomen, legs, back, and buttocks

First, remove the gown If the patient is helpless, or the doctor

(Continued on p 30)

DO YOU Want to Reduce?

HARRY W. MILLER, M.D.

MANY people are interested in getting their weight down, chiefly to improve their figure and posture. But *appearance is trivial compared* with the handicap of the over-weight as the physician sees it.

Surplus weight limits usefulness, cuts down the daily work production, and is a big factor in shortening life and prematurely setting off a great series of disorders. High blood pressure, heart disease, diabetes, arthritis, nephritis, and apoplexy may have their origin in association with over-weight, and numerous acute and chronic afflictions may be seriously complicated by it.

The surgeon always regards the obese person as an added risk. The physician always considers the obese person as having a less favourable chance for recuperation from disease, for it is well known that bodily resistance against infection is lowered as excess fat increases. So greatly should these facts impress themselves upon the over-weight group that they will determine to put forth sincere efforts to reduce. This is altogether possible to all except a rare few.

The Usual Cause

Weight increase in most cases is the result of over-eating plus a lively digestive ability. We recognize that certain family tendencies produce stouter figures in some instances. Often in babyhood and childhood we see the beginning of marked obesity, but we can rely on the science of nutrition to diminish these tendencies.

Rather than cut down on his eating the average person seeks the physician in search of some drug or remedy that will reduce weight. Certain medicines may be used in the weight-reduction programme, but only under medical supervision. However do not make pills and injections your first try. They need be called on only in rare instances.

Some persons have high metabolism such as occurs in toxic goitre. That means the body requires more than normal rations. In spite of the great amount the body burns up, they increase in weight because of their remarkable ability to digest. Similarly, drugs may act like toxic hormones and put an accelerated activity on all the organs. Yet this drain can be *more than compensated* for by hearty meals coupled with efficient digestive ability. There is no remedy except a control of the amount of food eaten.

Conserve Your Digestive Powers

Those desiring long life and health should plan on conserving the digestive powers. In turn, the eliminative mechanism is spared from early break-down. After all the human being is like a machine. If there is too much wear and tear he is sure to show break-down and disease prematurely. By carefulness in diet and life these can either be avoided or long delayed.

In nutrition we recognize five distinct food materials—protein, vitamins, minerals, fats, and carbohydrates. When we eat more fats or carbohydrates than we need immediately, the body stores them in its reservoirs. The size of these

reservoirs is not the same in all people. Some may store excessive amounts of fat, others much less. Protein, vitamins, and minerals are not stored by the body, and they can be used only as the body needs them daily. It is important that we get enough of these three vital and essential parts of our nutrition. If we do not eat them daily the body is inadequately supplied.

Keep Fats and Starchs Low

In weight reduction we are concerned with keeping the fats and starches down to a very low level and to have only enough protein for body maintenance. Only if we eat just enough protein to supply the body requirements and keep fats and carbohydrates under our daily energy requirements, will we find our body weight creeping downward. Under this programme you get the best of hereditary tendencies, and all other weight-boosting factors.

Though you eat less than other members of your family and still gain weight, do not lose faith in the idea that it is possible for you to lose weight through limited eating. It is possible.

In the internment camps we found that when the total allowances of food were far below nutritional requirements all persons lost weight. Those who were fat lost more rapidly than those who were thin. It is interesting that the corpulent person who lost thirty, forty, fifty, and in some instances even sixty pounds, found that a number of illnesses disappeared from which he formerly suffered—arthritis, neuritis, sleeplessness, shortness of breath, fatigue, high blood pressure, and a number of other complaints.

Every person who lost heavily said he felt good and was surprised he did not feel weak. It need not be a surprise that when one unloads thirty to sixty pounds of weight from his body, the muscles perform better, the heart works more efficiently, and he can perform many acts with much greater ease than before, with less fatigue, and certainly less wear and tear on the vital organs of his body. It makes him realize that they will not simply work away quietly all by themselves until a good old age, unless hindrances and over-loads are removed.

If you are interested in losing weight, put it down for a certainty that you can lose those extra pounds. The first step is to really *want* to reduce and show some *will power* about dieting. The next step is to have a *planned diet* prepared for you and *follow it religiously*. Do not accept appetite as a guide.

In weight reduction a properly planned and carefully measured diet is the most important essential. Such a diet should be planned with a physician and checked with him at stated intervals. You must be certain that your vitamin and mineral needs are properly supplied in your diet and that you have enough protein.

In a carefully regulated diet programme, weight reduction need not be a hardship if you are willing to co-operate sincerely and go about it in a sensible way. Do not be discouraged if you do not lose quickly, or if your weight sometimes takes a turn upward. Carry out to the letter your planned programme as to amount of food, fluid, and exercise. The results are certain and gratifying.

When you have reached your low weight level, learn how to proceed on a measured diet to hold a steady weight. Once you have lost weight it is extremely important to keep your body weight down. To break loose, and climb back to a heavy body weight is not good, for the vital organs could

(Continued on p. 28.)

"Man, I can't find your heart!"

DIABETES

EDWARD PODOLSKY, M.D.

Do you have diabetes? Check yourself with these signs the body gives when diabetes is present

THERE are certain signs and symptoms so characteristic of diabetes that they suggest it *immediately to the physician* They are rapid loss of weight, general weakness, abnormally large appetite, great desire for water, backache, skin disorders, and enormous amount of body wastes

When there is a rapid loss of weight without fever, the chances are great that the patient is suffering from diabetes This symptom is seen so frequently in diabetes that many physicians regard it as characteristic

Increased thirst and increased urine output are so well known as signs of diabetes that they suggest it at once, though a person may have the disease without these two rather prominent symptoms When the patient has a desire for water he drinks huge quantities of it during the day Often his thirst is so great that no amount of water satisfies it

Occurring with an abnormal desire for water is an abnormal desire for food The reason for this double desire is very simple The diabetic is not able to make use of the food he eats It actually drains away through the urine in the form of sugar, and leaves with the body wastes The pancreas is defective and unable to furnish the insulin required to help transform food into living energy and body tissue This is why the undiscovered diabetic always feels weak, rundown and tired, and why he loses weight rapidly

Disorders of the skin such as boils carbuncles, eczema, and itching may at times be the only signals that diabetes is *present* When these skin ailments do not yield to ordinary treatment as *promptly* as they should, there is good reason to believe that diabetes may be the underlying cause

Backache is another rather *common symptom in diabetes* It is thought to be due to distension c the kidneys from their extra burd of urine Because there is a *enormous quantity of* water bein taken on as well as given off, it easy to see why backache is common symptom in diabete When backache occurs with in creased water drinking and in creased urine output, the suggestion of diabetes is indeed strong

B I S

Laboratory studies are valuable in helping the doctor to arrive at a diagnosis of diabetes.

When diabetes is advanced, there are other signs and symptoms frequently in the eyes The diabetic cataract, diabetic inflammation of the retina, or softening of the eyeballs may be discovered by the eye specialist in a person who thought himself to be free of this disease Yet these eye conditions are signs of a rather advanced stage of t

There may be other signs, such as dryness of the mouth and throat, tooth defects, and gum infections, which a careful mouth examination often reveals in a diabetic Hardening of the arteries and certain diseases of the heart may also be due directly to great quantities of sugar in the blood

In addition to physical signs and symptoms, laboratory studies are valuable in helping the doctor to arrive at a diagnosis of diabetes The urine and blood are the body fluids most frequently tested for sugar and other substances characteristic of this disease

The first thing to be determined is whether there is an increase in the specific gravity of the urine Specific gravity is in one sense a measure of the amount of solids held in solution in a liquid, and in the case of diabetes the chief dissolved solid is sugar Thus a pale urine with a specific gravity of more than 1 030 is suggestive of sugar and diabetes An examination of one specimen of urine is of little value, a twenty-four-hour collection of urine gives a more accurate test

There are various factors besides diabetes that may cause sugar to leak away into the urine After a heavy meal or after an indulgence in sweets, sugar will temporarily appear in the urine of a person free from diabetes In a twenty-four-hour urine specimen, sugar from such sources is usually diluted enough to allay suspicion of diabetes

If there is a constant spilling of sugar during the day, the chances are strong that diabetes is present If it is present, a twenty-four-hour voiding will show a significant amount of sugar

Blood lipoids or fatty bodies are now considered of even greater value than sugar in the diagnosis of diabetes

Testing the urine alone is not sufficient for a diagnosis The physician must also estimate the amount of sugar in the blood When there is an increase in both blood sugar and urine sugar on repeated testing, the doctor may be quite certain of diabetes But a fact not always taken into consideration is that more than one blood-sugar estimation is required It should be taken at various intervals during the day

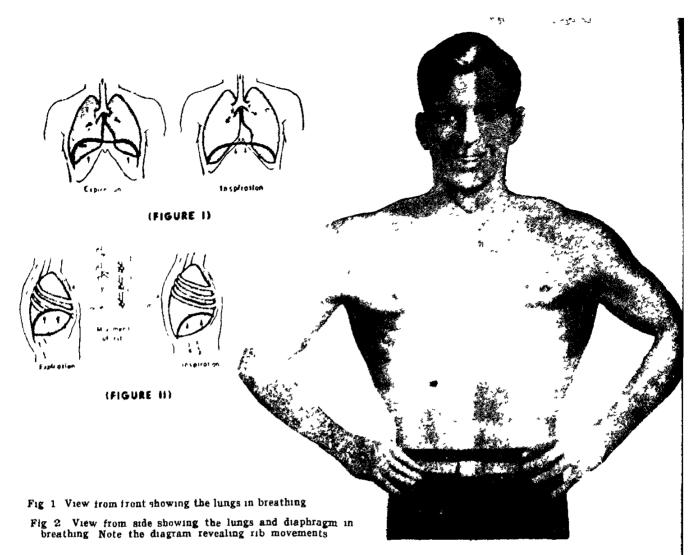
If the blood sugar is normal at all times and the urine sugar is above normal, the chances are that the patient is not suffering from diabetes This condition, occurring mostly in young people, is nothing to worry about

It addition to sugar, various acids may appear in the urine Some of them may offer further signs of diabetes

There are no hard and fast rules in the diagnosis of diabetes All

(Continued on p 28)

Fig 1 View from front showing the lungs in breathing

Fig 2 View from side showing the lungs and diaphragm in breathing Note the diagram revealing rib movements

Keeping Fit Functionally

S. B. WHITEHEAD, D.Sc.

THERE are broadly two approaches to the problem of keeping well in winter, and indeed in other seasons, too

You can take the view that the human body is a rather frail and sensitive organism, needing every protection from the hazards of cold and inclement weather, and the reinforcement of such things as pills, synthetic vitamins, or the latest vaccine or immunizing treatment against infection

Or you can believe in the body's own ability to adapt itself to the winter climate, and help it to build up its own health defences by keeping fit One is a negative approach, the other a positive

Unfortunately, keeping fit raises a picture in many minds of taking strenuous exercise, cold baths, and other rigorous regimes Good health, however, does not depend upon being athletically fit, but functionally fit Functional fitness is within the grasp of everyone, regardless of age or sex It is not a matter of developing big muscles or the ability to run the hundred yards in under eleven seconds It is a matter of keeping the major organs of elimination working smoothly and efficiently It is something one must do to know the joy of positive health

All too often these organs are taken for granted until they break down, and by then the body is in serious trouble. The purpose of these organs is protective They prevent toxins, bacteria, and harmful organisms from accumulating in the body to undermine its integrity Sickness and infection cannot flourish where the major organs of elimination are functioning efficiently

The skin, for instance, is a much neglected organ. Susceptibility to chill, damp weather, and vulnerability to air-borne infections are primarily traceable to a poorly functioning skin

The skin forms a barrier to bacteria, dirt, and harmful substances of many kinds It is also the

thermostat of the body, and by the speed with which it opens and closes its pores when we pass from low outdoor temperatures to higher indoor ones has much to do with our resistance to air-borne bacteria. It is also an excretory organ, relieving the body of waste moisture, dead bacteria, and many toxins from the bloodstream

The skin also has its continuation within the body in the mucous membrane The two are sympathetic When the skin works sluggishly, the mucous membranes are also apt to be slow in trapping and removing dirt and bacteria inhaled into the head passages and throat This paves the way to the common cold or worse, to catarrh and chronic inflammation of the sinuses, bronchial tubes, or throat Yet it is a simple matter to keep the skin fit

First, it does not need coddling in close-fitting, heavy clothes If the skin is to work fully, it must be able to breathe You want loose, light clothing for this It can be warm in texture but does not need to be heavy You can add more top garments for outdoors Second, it needs the daily stimulus of exercise Cold weather is not inimical if you are active in it It is then a stimulus The ideal should be to walk, play, or generate sufficient warmth within yourself to return indoors in a glow

Thirdly, the skin needs friction A daily rub-down with a rough towel, followed by a hand massage with a little vegetable or olive oil, will keep the skin cleaner and more active than any amount of soaking in hot, soapy baths Medical opinion has veered to the effect that too much soap-and-water bathing is not beneficial to the skin It removes too much of the natural, germ-sterilizing oil Even the cold bath is not absolutely essential Generally it is far better to do a dozen early morning physical jerks, with the air playing on your skin, as this acts as a mild massage

Finally, one of the finest ways of improving skin function is to irradiate the skin with ultra-violet light for a few minutes every other day, using an artificial sun lamp This not only excites skin action, but enriches the body with vitamin D

Most people realize the importance of regular bowel movement to their health Any delay or stoppage in the evacuation of

intestinal wastes, acts as a brake on the digestion, blood, and entire being This is because the waste material consists of more than just the indigestible residue of food It contains the germ- and dirt-laden mucus that flows down from the mouth and nose It contains the wastes from the blood represented in the bile The body can only achieve a limited immunity from these toxins in their passage

But the cure for constipation does not lie with laxatives or cathartics Any laxative effect needed should be provided by a properly balanced diet, rich in vitamin B foods, roughage, and fresh fare After that the key to efficient bowel function lies in (1) regular visits to stool, preferably after meals; and (2) a squatting position at stool with buttocks low down and anus so spread open,

and knees well up This can be achieved by placing a box, or rest under the feet But regularity is the key, since the body responds to rhythm

Few people give much thought to the functional aspects of the kidneys and genito-urinary system But if your nerves are to remain vital and sound and your system free from the menace of over-acidity, these organs must function perfectly There should be at least six renal calls a day The composition of the urine is dictated largely by what we eat and drink In winter, the emphasis should be placed more than usual upon the alkaline-forming fruits, vegetables, milk and dairy foods

Irregularities call for less tea, coffee, and stimulants, and more fruit and vegetable juices, soups and salads, plus the daily use of olive oil It is not generally appreciated that walking in cold weather is a most powerful tonic to the genito-urinary system

Incidentally, it should not be forgotten that the feet are important eliminative channels The soles of the feet contain more pores per square inch, than the skin of the body elsewhere Habitual cold feet can be limiting to health Their cure calls for contrast baths, *plunging the feet into very hot* water for a minute, and then into cold, and alternating several times, before drying well and oiling

The only other major organ of elimination consists of the lungs Whether you catch colds frequently or not depends very much

(Continued on p 21)

Stop Sinusitis

JAMES J McFARLAND, M D

Avoid if you can the irritating pain caused by diseased sinuses

DO YOU suffer from the holes in your head? Sinuses are just that holes, or spaces, in the bones of your face Two are above the eyes, two below, two behind, and two between a total of eight The so-called sinus headache is one of the most common complaints human flesh is afflicted with

Headache, usually above the eyes or over the cheeks, stuffy nose, and discharge from the nose, either from the nostrils or down the back of the throat are the most frequent complaints.

What trouble do these spaces cause? The most frequent complaints are headache, usually above the eyes or over the cheeks, stuffy nose, and discharge from the nose either from the nostrils or down the back of the throat Discharge down the back of the throat is called postnasal drip

Although these troubles are symptoms of sinusitis, many people who have them don't have real sinusitis but may be suffering from catarrh, nasal allergy, prolonged cold, or a minor irritation of the sinuses Only your doctor can tell the difference

If he decides that you do have sinusitis don't despair Most cases of sinusitis can be cured with modern treatment By no means is the old saying "Once a sinus sufferer always a sinus sufferer" true today

In children practically all nasal trouble of a chronic nature is due to obstruction of the nose from nasal allergy or large adenoids Either of these conditions may cause chronic nasal trouble Sinusitis is extremely rare in young children Some of the sinuses don't develop until the child is nine or ten years old Another form of chronic nose trouble in children is from foreign bodies that the child may insert in his nose. They may be beans, rocks, rubber erasers or a toy dog's eyes They cause a fo[illegible]

smelling discharge from one nostril, or both nostrils if the child has inserted the objects in both nostrils

Sinusitis may be either acute or chronic

Don't worry too much when in the middle of a bad cold your head begins to hurt like fury or your teeth pain so much that you think they are going to fall out That is acute sinusitis, and should last only a few days

Your doctor will probably treat you in such a way that you may recover and not suffer again

The real trouble-maker is chronic sinusitis One kind is what doctors call chronic infectious sinusitis It is due either to frequent attacks of acute sinusitis, other diseases, or abnormalities of the nose You can even get it in your cheek sinuses from root abscesses of your upper teeth

Many nose specialists now believe that the greatest single factor causing chronic sinusitis and sinus headache is some sort of allergy Three to one the offender is common household dust It can be plant pollen, other dusts, or occasionally foods such as chocolate sweets, milk, and coffee

A few years ago the doctor either repeatedly punctured the sinuses to drain them or operated to remove diseased tissue If the patient happened to be a victim of allergy, he was usually worse after a prolonged session with the surgeon instead of better Often the operation had to be repeated

Operations have been largely replaced by local and systemic treatment Surgery is still necessary in some cases, but the new idea is to try not to remove any tissue

If the doctor finds you have allergy, he will usually begin a series of tests to find the offending substance Once it is discovered, he will try to keep you away from it If this is not possible, he may give you a series of shots to make you immune to the offending substance

Gobind Lal

Don't swim, or dive when you have a cold

This is one instance where an injection of the "hair of the dog that bit you' is good for you

What can you do to help prevent or cure yourself of sinusitis?

1 Don't dose yourself with self-prescribed nose drops or sprays Any continued use of nose drops irritates the delicate lining of your nose and sinuses

Nose drops and sprays could not do too much for the deep-lying sinuses They are too far out of your reach for treatment of this kind

2 Don't try to treat yourself You may not have sinusitis See your doctor, and let him treat you

Not only are your sinuses too inaccessible for you to treat with ordinary means likely to be at your disposal, but you may be reading your symptoms wrong You would be losing time that should be given to taking care of the difficulty you actually do have

3 Don't blow your nose too hard

Blow your nose lightly, in order to avoid forcing the germs of a cold into your sinuses Learn to blow your nose properly both sides at once, so that you will not push air into other parts of your nasal passages It will take a little practice, but don't give up until you do it correctly without thinking It's worth the trouble

4 Don't swim, dive, or fly in a plane when you have a cold

5 Try not to expose yourself to colds

6 Be sure your trouble *is not* an allergy But if it should prove to be, try to avoid exposure to the things that bother you, or take shots

7 Avoid smoking Smoke is a natural irritant, and if you smoke it will further irritate an already inflamed nose, throat, and sinus

8 Don't eat too many sweets and too much chocolate

9 Drink plenty of fruit juices and healthful fluid of any kind Water helps you throw off body wastes Alcoholic drinks are not to be taken

10 Get plenty of rest and sleep, and try to live a life as easy and free from worry as you possibly can

11 Don't move to another climate for chronic sinusitis unless you and your doctor are definitely sure that the new climate will help you You might find that after a few weeks your condition would be as bad as ever Contrary to almost everyone's opinion, a damp climate in itself does not cause sinus trouble

We are all created with sinuses, and if we live a sane, sensible life and treat them and our bodies properly we should get along with them and "live happily ever after"

Baby's First Year Food

IRES J WEBSTER, B S,
DIETITIAN

MANY plans for food additions in the first year are offered to the busy mother and homemaker A mother needs to know what her child can eat from the time the first solid foods are added to the breast milk or formula We offer our suggestions through experience in working with child specialists

At the one-month visit to the doctor, discuss the baby's food The doctor will add some form of vitamin D Vitamin D is a group There are at least fourteen forms of it Each form has a different action Water-soluble vitamins and fat-soluble vitamins have been combined into suitable liquids They may be put into the formula, added to some of the solid foods, or given directly by mouth If oleum percomorphum is given, place the oil well back on the infant's tongue

You may start orange juice by putting one or two teaspoons of strained orange juice into the baby's bottle and adding water to make one tablespoon Orange juice may be freshly squeezed Wash oranges with soap and water and thoroughly rinse before cutting After cutting the orange in half, place a piece of gauze over a strainer to prevent the particles of segment from coming through If allowed to come through into the orange juice itself, the particles of segment will stop up the nipple of baby's bottle Do not press the orange through the gauze, for this action will allow the segment to go through into the orange juice Be careful not to squeeze out the oils in the orange skin They may cause colic

At the two-month visit to the doctor he may add a very ripe banana to the diet A ripe banana may be recognized by brown spots on the skin This does not mean that you are to give your baby bananas every day, as in the case of orange juice But they may be given as an additional food as desired At first the baby may object to this different type of food, but be persistent Keep giving him a taste, and he will become accustomed to it You may give him a half inch or an inch of the banana at one time Mash it well before feeding it to baby

When baby is three months old, the doctor no doubt would start some additional solid food He would likely start with vegetables for early in life the baby needs the vitamins and minerals found in vegetables Sieve the vegetables for baby You may do this by passing cooked vegetables through a food mill or a sieve Vegetables rather than cereals are given at this early date because cereals have a sweet taste that we wish to avoid devel oping too early in the baby

It is best to start vegetables one at a time (If allergic signs develop, refer baby to a specialist) A few days later you may add another vegetable After all the acceptable vegetables have been tried without difficulty, you may use any combination Start a new food with one teaspoonful a day

N Ramakrishnan

Over-weight children usually have a very good appetite, and for their health's sake we must not serve them everything they wish.

and gradually increase to one or two tablespoonfuls or more a day

Use a flat spoon in feeding baby the vegetables He may spit out this new type of food If he does, replace the rejected food immediately and offer a swallow of milk with it Continue to offer baby a taste until he becomes familiar with the new food and enjoys it Such vegetables as carrots, pear, squash, and green beans are excellent to start with

Cooked egg yolks may be started during the fourth month if no previous allergies have appeared Take the yolk from a hard-boiled egg and put it through a sieve or crumble with a fork, making a paste with a small amount of formula or skim milk You may use the yolk in an unsweetened soft custard or even add it directly to the formula

Use the egg yolk in small quantity at first, increasing gradually until you have used the whole yolk of one egg

When you add to the formula, first add two or three tablespoonfuls of cold sterile water to the mashed yolk, and mix well Add an equal amount of warm formula, and mix well Then strain the egg mixture into the warm formula, stirring constantly Heat this mixture, but do not boil it Using sterile funnel and strainer, pour it immediately into bottles

During the fourth month, the vegetables may be increased slightly to two or three ounces a day or even more if the child desires Solid foods should gradually be replacing some of the milk in the diet

During the fifth month you may start baby on pureed fruits. Add them one at a time and in small amounts Begin with bland fruits, such as apple-sauce or peaches Add other fruits later Add prunes very carefully Fruit has a laxative effect The quantity of fruit given a baby must be regulated to the needs of the individual child Prune juice or prune pulp may be helpful for babies having firm stools Give prune juice according to the character of the stools, beginning with one teaspoonful

It is found to be better for baby if fruits and vegetables are given at separate meals

The fifth month is a good time for baby to begin drinking from a glass It will be easier to wean him later if he learns early to drink from a glass or a cup

As the sixth month comes round it is time to begin weaning How-

ever, baby need not be entirely weaned until nine months Baby's milk or formula should be changed gradually to whole milk Here is the plan for you in changing from evaporated milk formula to whole milk For two days use three-fourths cup of evaporated milk formula to one-fourth cup of whole milk Or, for one fourth of your formula use whole milk After two days of this percentage, increase the whole milk another fourth, making the formula now half evaporated milk and half whole milk Use this for two days Then cut the evaporated milk to one fourth the volume of the total formula, the other three fourths being whole milk After several days of this mixture, you may change to whole milk (pasteurized, but not homogenized)

Cereal fits nicely into the diet at six months. The child requires more carbohydrate. He is gaining rapidly, and he needs more calories Start with cereal prepared at home, using one teaspoon at first and gradually increasing up to two tablespoonfuls at one feeding Add enough pasteurized or sterilized whole milk to the cereal to make a thin mixture Once or twice a day you may give cereal that is whole grain finely ground

Babies at six months need something a little hard to chew on so that they may develop their jaws properly You may give zwieback or bread crusts occasionally for this purpose

The seventh month brings a few more items to baby's diet You may give the whole egg, starting with only a very small portion of the egg white at one meal Gradually increase the amount over a four-or-five-day period until baby is able to take the whole egg

Watch out here for allergy If a rash or other symptoms appear, decrease wheat, egg, and other known allergens until baby can be seen by a specialist If baby does not seem to be allergic, he may have one whole egg three times a week Hard boil (cook eight minutes) or scramble the egg You may mix the egg with a little pasteurized milk if desired

You may add very simple desserts occasionally They too must be started in small amounts and only gradually increased At

no time allow desserts to take the place of the basic foods, which are much more important to complete nutrition Fruits are the best desserts

During the eighth month, cottage cheese and mashed potatoes may appear in the diet, with the amount gradually increased from one or two teaspoonfuls

We are aiming toward developing variety in the diet now, so remember this in choosing baby's food Pleasing colour, texture, and flavour add zest

Sometimes a child becomes overweight When he does, it becomes necessary to eliminate even the simple fattening foods, such as cream and starchy foods Overweight children usually have a very good appetite, and for their health's sake we must not serve them everything they wish We want to keep their weight within normal limits An overweight baby should not be given bread, cereal and potato in one day One of these foods a day will be sufficient for a baby who is gaining too much weight Use skim milk if possible

It is important that baby eat varied textures in foods It is not necessary for him to have teeth to do this He may use the same foods as the rest of the family provided they are good nutritionally Using the same good vegetables, mash slightly upon serving This accustoms baby gradually to larger particles of food Do not use strongly flavoured vegetables until after the first year however

Starting at six months, and continuing throughout the first year place baby on a programme of three regular planned meals daily Do not be surprised if he sometimes decides he does not like certain foods This is normal His eating habits are changing he is experimenting At times he may eat very well, and again he may eat a very small amount Do not force him to eat any foods If he develops a dislike for carrots, serve him other vegetables, and gradually incorporate carrots in small amounts with the desired vegetable until carrots are re-established in his diet Forcing something not wanted produces poor eating habits Children fluctuate a great deal in their attitudes

From ten months to a year old, baby should weigh three times his original birth weight, or seventeen to twenty-five pounds Being on a three-meal schedule for breakfast he should be taking six to eight ounces of pasteurized whole milk from a cup or glass, one or two ounces (one-fourth to one-half cup) of finely ground, assorted whole-grain cereals, such as cooked, strained cut oats, oatmeal without husk, cooked, yellow, enriched, unbolted corn meal, cooked whole-wheat flour, wheat-germ flour cooked in Cream of Wheat, and milled cereals, such as Cream of Rice Cream of Rye,

and rolled oats Do not use puffed or steamed commercial cereals For baby up to one year, cook all cereals from one to one and one-half hours, regardless of directions on packages

If you do not use cereal, give baby one half to one and one-half slices of plain or toasted bread It is better to use day-old yeast breads than quick and fresh breads

Give some fruits besides the orange juice Serve baby either chopped or mashed cooked fruits dried or canned Use several tablespoonfuls of ripe sliced banana, cooked ripe persimmons, cooked peaches, cooked peeled apricots apples cooked, baked without the skin, or as applesauce, cooked peeled pears, and cooked Royal Anne cherries without seed and skins Avoid gas-forming fruits such as melons Avoid skins of grapes and seeds of berries and figs

We must not forget the fish-liver oils, to be taken at breakfast time if the doctor has ordered them Sunshine is limited in some areas and we must be sure baby gets some vitamin D

The midday meal should include protein food such as one hard cooked egg or one tablespoonful of cottage cheese Six to eight ounces of milk, which may be used in the form of soup with vegetables must be taken at every meal One-third to one-half cup of baked, mashed, or riced potato is usually given at the noon meal, along with some other vegetable such as chopped carrot, strained green soybeans strained green Lima beans, strained snap beans, strained cream-style corn, sieved tomato, chopped strained cooked celery, cooked hearts of artichokes, and strained mashed sweet potato Such vegetables as cauliflower, cabbage, and kale are gas formers, and should not be given Children's stomachs and intestines cannot handle them Vegetables containing oxalic acid should not be served Spinach asparagus, beet tops, and Swiss chard all contain oxalic acid, and should be avoided in baby's diet Children's kidneys cannot handle foods containing oxalic acid

The night meal should consist of six to eight ounces of milk, one or two ounces of mashed or chopped vegetables, one-half slice of dry toast or zwieback, and one to two ounces of mashed or chopped fruit (It takes two to four tablespoon-

fu's to make one to two ounces of fruits or vegetables)

The fruits are to be peeled, strained, and mashed Fruit with seeds should not be given All the fruits should be of a bland variety Oxalic acid in fruit should be avoided Fruits such as sour plums, gooseberries, cranberries, and rhubarb contain oxalic acid, and should be eliminated from the diet

As the child grows you may permit a wider selection of foods However, milk continues to be of prime importance in the diet, in the amount of at least twelve ounces a day Avoid nuts, because of the danger of their being breathed into the lungs Avoid altogether the greasy, highly seasoned, and fatty foods Also avoid excessively sweet foods They tend to dull the appetite and hinder the intake of the more essential foods Dentists emphasize that no white flour, white sugar, or white rice are to be used

Early establishment of proper feeding habits is probably the most important factor involved in maintaining an adequate diet for baby up to a year and afterward Knowing that you are giving your little one the proper food at the proper time during his first year—as recommended by child specialists—will give you confidence that you are providing for him a good diet

KEEPING FIT FUNCTIONALLY

(Continued from p 15)

on how you breathe in and out The greater the capacity of the lungs you use, the better, for then you not only oxygenate the blood more thoroughly, but also you relieve it more completely of its most deadly toxin, carbon dioxide

You can also, from choice, breathe through your nose or your mouth By using your nose, you trap dirt and other material carried in with the air, you filter out germs, and you warm the air before it reaches the lungs, all of which means that your lungs are more protected from damage than by mouth-breathing

The positive practice of full breathing is one you can use at any hour of the day The more fully you inhale and exhale, the more strongly your whole body can function and maintain itself in good health, for after all, breath is life, and your breathing is the function from which all else takes its cue

HOMEMAKERS' HELPS

RECIPES

Farmer's Favourite Soup

One-third cup macaroni; 3 cups boiling water; 1 small onion; 1 stalk celery; 1 carrot; 1 potato; ½ cup sour cream, rich, chopped parsley; salt

Drop macaroni into 3 cups boiling water, and cook Dice vegetables Boil cream until brown, add diced vegetables, salt, and 3 cups water, and cook until thoroughly done Add drained macaroni and parsley Add more water if necessary

Spinach Loaf

Two cups spinach, boiled, finely cut; ¼ cup onion, raw, minced; 1 egg, well beaten, ¼ cup cheese, grated; ½ cup bread crumbs; salt to taste; butter to taste, 2 cups tomato sauce

Combine all ingredients except tomato sauce Place in a well oiled baking dish Bake until firm (350°F) Serve piping hot with tomato sauce

Tomato Rice

Half seer fine rice; ½ lb. tomatoes; 3 tablespoonfuls ghee; salt to taste; 1 tablespoonful cumin; 1 piece turmeric, 6 pepper corns; 1 piece ginger.

Pick and wash the rice Pour boiling water over the tomatoes, cover and keep for a while, then peel tomatoes Strain and remove all the seeds Put only plup and juice Grind masala Heat the ghee in a degchi, then put ground masala and slightly brown it, then add rice, tomato juice, salt to taste and water about 3 fingers above the rice Stir well When the rice is nearly cooked reduce the fire underneath and keep live coals above Stir frequently with the handle of the ladle Serve hot with curry

Vegetable Curry Without Chillies

Two lbs. vegetables (potatoes, beans or any other); half coconut; 1 tomato; 2 garlic seeds; few coriander leaves; 1 teaspoonful cumin, 1 teaspoonful coriander; 1 piece turmeric; 1 teaspoonful gram dhal; 1 piece ginger; 1 onion, sliced

Wash the vegetables, then cut and boil Grind half a coconut, taking thick and thin juices separately Then grind the masala with the thin juice to a fine paste Fry the sliced onion in hot ghee, putting the masala and its water as much as required to make curry Boil well and then add cooked vegetables and salt to taste

When boiling add the thick coconut juice Simmer for 10 minutes

The Island Salad

One and one-fourth cups crushed pineapple; ½ lemon (juice); ¼ cup sugar; 1 tablespoonful gelatin; 1 cup mild, grated cheese; 1 cup whipping cream; ¼ cup chopped celery; 6 to 12 olives; lettuce or water cress.

Heat 1 cup of the pineapple, lemon juice, and sugar for five minutes Soak gelatin in 1 tablespoonful cold water for 5 minutes and add to hot pineapple. When it begins to set, add 1 cup grated cheese and whipped cream Pour into moulds Add chopped celery and the remaining ¼ cup of crushed pineapple drained, to favourite salad dressing, pour over or around salad, and serve with olives on lettuce or water cress

Guava Jelly

To each pint of guava juice allow ¾ lb. of sugar and 1 tablespoonful of lime-juice.

Peel and slice the guavas and put them into a preserving pan with sufficient water to cover them Simmer gently until the fruit is tender stirring occasionally with a wooden spoon Then strain through a jelly cloth, measure the juice and put it into a preserving pan with the above proportion of sugar and lime juice Stir carefully until the sugar is dissolved Boil until the jelly will set, and remove any scum that rises

Chocolate Cake

Five eggs; ½ teaspoonful salt; 2/3 cup boiling water; 1½ cups sugar; ½ cup oil; 1 teaspoonful vanilla; 2 cups flour; ¼ cup cocoa.

Set dish containing eggs and salt in a pan of very hot water Beat with a rotary beater until eggs are slightly more than 100°F Remove from water and continue beating until batter piles Add boiling water slowly with beating Beat until batter piles again Beat in the sugar gradually Fold in the oil lightly and mix well Add flavouring Sift flour and cocoa together over the top of the batter ½ cup at a time, and fold in lightly until smooth Bake in ungreased pans—tube, loaf, or cupcake Bake 45 minutes at 325°F and increase to 350°F for 15 minutes Invert pan to cool

Aardapelem Koek

Half lb. potatoes; ¼ lb. flour, 2 eggs; 1¼ pints coconut milk, a pinch of salt; soft sugar.

Boil and mash the potatoes finely Put the flour into a basin, add about half the milk and beat to a smooth paste Then add the eggs well beaten and mix in the potatoes Thin down with the remainder of the milk and add a good pinch of salt Make small pancakes with the mixture and serve them hot rolled up with sugar

KIDDIES' KORNER

THE CATAPULT CONTEST

DANNY WILLIAMS

THE warm summer sun was pouring down hotly as Mohan took the catapult out of his pocket and looked it over critically It was going to be tough, he realized, winning the catapult contest.

He frowned, glancing up at the group of boys gathered near the tree on the playground Some distance away stood the target "Oh, well," he said aloud, "I don't care if I do lose, it's only a contest" He grinned "But I'd sure like to beat Sohan Lall this year!"

Mohammed Ali, who was the son of the principal, and went to high school now, stood up Trying to make his voice very low and important, he shouted, "Get ready, group one!" He was supervising the contest

The boys shot quickly Then it was Sohan's turn He stepped up to the mark on the ground For a moment he looked at the target, then shot

"You hit the inside ring!" Mohammed shouted

Then it was Mohan's turn He stepped up His muscles were tense, and his hands trembled with excitement "You'll never beat Sohan!" someone yelled "Sohan's better than you, Mohan!"

He forced himself to remain calm Carefully he aimed, fired The small stone shot toward the target Mohammed was silent a moment "Bull's eye! You beat him, Mohan! You beat Sohan!" he cried

The rest of the boys looked up in surprise Then most of them turned away, their eyes on the ground, mumbling to one another that it wasn't their fault they hadn't won But suddenly the group stopped their sullen walk "Hey! Look out, Mohan!" Thiagaraj shouted

Mohan whirled about, just in time to feel his jaw-bone shudder as Sohan's fist fell away from his face Mohan, holding his hand over his chin, stared at Sohan in surprise and hurt "Say—what's the meaning of this?"

"You think you're smart, don't you?" Sohan said, moving closer

Mohan drew away instinctively "Look, Sohan—it was just a contest Don't get so excited I—"

"Yeah? Well, from now on don't try to get the others to think you're better than I am I'm the best around here, see?"

"There's going to be a fight!" Rajan yelled A group crowded about, expressions of excited anticipation on their faces

"Look—don't try to act so

tough. It was just a contest You're good too—but this time—"

"Yeah? Well, it so happens I beat you," Sohan said, his lower lip thrust outward "Just because Mohammed can't see straight doesn't mean you can take the credit for winning!"

Mohan frowned, worried and surprised It had been rumoured that Sohan had a bad temper—but this was silly What was so all-important about winning the contest? The way Sohan was acting—

His thoughts were cut off by a sharp blow Instantly his fist knotted His arms flung upward as he cut Sohan across the chin Then he jumped back, breathing quickly, perspiration on his face, blood pounding in his ears

Sohan was rushing at him He jumped aside The group was encouraging him, and their shouts angered Sohan even more Now he was running at Mohan crazily, flinging his fists wildly, his eyes blazing furiously

Mohan waited until Sohan neared him, then struck him strongly

A fast fight followed Then a blow sent Mohan rolling several feet When he got up, his eyes froze with horror Sohan was grabbing his catapult and picking up a stone

"Hey!" Mohan shouted, his voice trembling The crowd backed away, startled and frightened Sohan was nearing Mohan, catapult ready Suddenly a stone was flying at Mohan It hit him on the shoulder, sending flames of pain through his body Then he had his own catapult out, and picking up a large stone, he sent it flying toward Sohan's terrified eyes

The stone hit Sohan on the forehead just as he was about to sling another one at Mohan.

Sohan fell to the ground and curled up, crying Then he was silent

Suddenly the principal was there, and Mohan was dragged away, still trembling and fighting with anger It was only later, in the principal's office, that he began to worry about Sohan Maybe he had really hurt him! His fears grew stronger when he saw the doctor drive up and get out, hurrying across the playground

Not being able to stand it any longer, he slipped out of the principal's office and ran over to the group on the playground The doctor was bending over the silent form He stood up and smiled "Nothing" he smiled "Just a cut on his head He's all right Scared to death, though" he grinned

Sohan stood up, then looked about, frightened His eyes caught Mohan "Hey, he was the one that did it! He shot me with his catapult!"

Frightened, Mohan started to run back but the principal caught him "I thought I told you to stay in my office," he said sternly

"I'm sorry I was anxious to know how Sohan was," Mohan said softly

Sohan started telling the group how Mohan had attacked him "Aw, come on, Sohan You don't expect us to believe that," someone shouted "We saw what happened You were the one to blame, not Mohan Sure, Mohan hurt you on purpose but only after you really hurt him

"I think you should both come into my office," the principal said

Later, as the two left Mohan held out a hand to Sohan "I'm sorry I hit you like that," he said "I think we both lost the contest"

"Aw, it was my fault, Sohan admitted "You won, but I shouldn't have lost my temper"

"Tell you what," said Mohan "Why don't you come over to my place tonight? I've been collecting old bottles, and they make the best targets Er, they're much better than shoulders"

"And foreheads, too, I imagine" grinned Sohan, rubbing his sore head "I'll be there and thanks very much"

THE DOCTOR SAYS

(Continued from p 26)

mities and face In fact the skin of the face appears to be like a mask because of its tightness The true cause of this disease is not fully understood Male sex hormones have been of benefit in some cases but treatment is not proved to be too effective Massage warm baths and ointment such as 1% Pilocerpine and 1% Salicylic Acid may help Nicotinic Acid, 100 mgm three times a day may also be of benefit by increasing blood circulation to the tissues I doubt that you have this rather rare malady and would urge you to have a proper diagnosis before you embark on any type of therapy

?

BLACK SPOTS ON SKIN Ques —"What should a lady of 44 years of age do in order to remove the black spotted marks on the skin covering the cheek bones From the top the skin is smooth, which shows the marks are subcutaneous Kindly give some suggestions to cure the spots"

Ans —Without examining the spots of which you speak, I am not certain as to their true nature, but suppose them to be a naevus or a pigmented mole It is sometimes advisable that black moles be removed surgically I would advise you to see a well qualified Dermatologist

?

PAINFUL URINATION Ques "For sometime past, my urinary passage burns after urination I have not yet consulted any doctor Will you please advise me what treatments are neccssary?"

Ans—I would advise that you have a microscopic examination of a stained urinary specimen to determine the causative organism of your complaint and be treated accordingly This should be done by a well qualified physician I suspect that you have a urinary infection

?

HYPERTENSION Ques—"Is Hypertension an incurable disease? If not what are the remedies for it? Specially when the patient suffers from headache after breakfast, relief after manual labour continued headache with little relief in the dusk and night"

Ans —Whether hypertension is curable or not depends upon the cause and type The most common type of hypertension is the so called essential the cause of which is obscure, but believed to be due to hormonal imbalance kidney damage and/or nervous factors If the adrenal gland is not functioning properly or if the blood supply to the kidney is decreased or if the person is on nervous tension blood pressure may go up The use of certain drugs such as tobacco may elevate blood pressure In fact one cigarette smoked may cause elevated pressure in a person sensitive to the drugs contained in it and will increase the pressure even in heavy smokers Treatment also is not consistently

satisfactory Reducing of weight if too fat will bring relief Rest, change of environment and pleasant occupation are valuable The use of Phenobarbitol ½ grain two or three times a day is often of benefit Recently the drug *Rauwolfia Serpentina* has proved to be efficacious One to two mgm two or three times a day to begin with, reducing the amount later if warranted is the suggested dosage Of course a hypertensive person should give up the use of tobacco, tea and coffee as well as stimulating foods which do play a part in some cases of elevated pressure Restricting the daily intake of Sodium Chloride to less than one gram brings marked results in some advanced cases The surgical operation **severing the lumbo-dorsal** sympathetic nerve chain on each side of the spine may lower the blood pressure Headaches usually respond to one or two Aspirin tablets Headaches are not usually attributable to the high blood pressure

1 This question and answer service is free only to regular subscribers

2 No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases

3 All questions must be addressed to The Doctor Says Correspondence personally with the doctor is not available through this service

4 Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES Answers cannot be expected under ONE MONTH

5 Questions sent in on Post Cards will not receive attention

6 Make questions short and to the point [illegible] them [illegible] clearly

7 Questions and answers will be published only if they are of such a nature as to be of general interest [illegible] without objection but no name will be published Address The Doctor Says Oriental Watchman and Herald of Health [illegible]

?

TUBERCULOSIS· Ques —"Please let me know whether Tuberculosis is an infectious disease and whether a patient suffering with this disease could be treated at home "

Ans —Tuberculosis is a highly infectious disease and should be treated in a sanatorium The patient should have absolute rest in bed until symptom free, which may take from six months to a year or more, depending upon the severity of the infection He should have the very best of nourishing food including an abundance of fruit and vegetables, protein foods and foods containing vitamins and minerals especially Calcium Certain wonder drugs are of great value such as Ambystrin, Isonex and Para Amino Salicylic Acid With this the patient should have one teaspoon of cod liver oil three times a day plus one Calcium tablet three times a day The most important part of the treatment is rest

?

HEMIPLEGIA Ques —"I am suffering from Hemiplegia on the left side in consequence to a head injury sustained by me in April last There was neither any fracture of bone nor loss of blood I have improved a little, but the progress is particularly slow in the arm, especially in fingers I can clasp them but cannot flex I can walk with my left foot I can lift the arm above my head straight and also can stretch it out parallel to the ground but it trembles while doing so Kindly advise me regarding suitable treatment "

Ans —Without examining you, I am not in a position to make a diagnosis of your complaint nor to recommend the type of treatment you should have There are a number of places where work in Neurology is very satisfactory One is at the Christian Medical College Hospital in Vellore, North Arcot District Another is the Seventh-day Adventist Sanitarium The Mall, near Cecil Hotel at Simla At this institution which has just been re-opened, there is an American Physio-therapist, who gives electrical and other types of treatment for Hemiplegia He is working under the direction of Dr I R Bazliel I can recommend these institutions very highly

?

LIMF JUICE Ques —"It is a prevalent opinion that continuous intake of lime juice on an empty stomach will in due course lead to impotency Even among doctors there is a divergence of opinion on this point Some emphatically say that lime juice contains certain properties to promote a premature end of teeth by destroying the enamel surface What is your opinion?"

Ans —The intake of lime juice in an empty stomach will not in itself lead to impotency There is, however, evidence that the lime juice, by increasing the acidity of the mouth for a time, may result in destroying the enamel surface of the teeth After taking lime juice or lemon juice, rinse the mouth with plain water which will prevent any adverse effect on the teeth

?

ARTHRITIC PAINS Ques —"I have been having a pain behind the left shoulder and it gets aggravated whenever I carry a haversack My doctor suspected a slipped disk as I also felt numbness in the arm An X-ray showed no slipped disk but chronic arthritis of the spine near the neck The treatment prescribed was 'traction' whereby I was lifted by the head until my feet almost dangled off the floor I took this treatment 12 times last year and felt much better Soon after this I had continuous pain in the small of the back and in the left knee which I thought to be a result of the 'traction' Could it be so? The shoulder and neck pain came on again after six months and I am again taking 'traction' with benefit Is 'traction safe to take? Will it bring on the back strain again? Does it relieve cervical arthritis?"

Ans —Traction is the proper treatment for the condition of which you complain In my opinion the traction treatments you received were not responsible for the pain you complain of in the small of the back and in the left knee You apparently have an arthritic condition that is affecting other joints as well as those of the neck Traction, application of heat and massage and rest is the best programme to follow

?

SCALY AND DRY SKIN Ques —"The skin on my hands and legs is shiny It is slightly irritating at times and has an unhealthy appearance I have had this complaint for the last 10 or 12 years, but now it is conspicuous My skin is very dry and scaly I have tried a course of Vitamin A injections but they were of no avail Please enlighten me as to what is the cause of this and of how to get rid of it "

Ans —Without examining your skin, I am not in a position to determine the exact nature of your complaint Some folk have from birth a thin delicate skin which may have the appearance you describe Aside from preventing too much exposure to sunshine not much can be done for this condition There is a rare disease known as Scleroderma which is characterised by a tight shiny skin especially on the extr

(Continued on p. 24)

"Now for a bath with Lifebuoy Soap"
—it gives that healthy feeling of freshness !
LIFEBUOY
SOAP
MADE IN INDIA

DO YOU WANT TO REDUCE?

(Continued from p 11)

be damaged Continue on a definite restricted programme

But you will be cheered to know that with a few weeks' experience you can select fruits, vegetables, and other foods that will give you more and more pleasure and appetite satisfaction You will discover to your joy that you relish the restricted meals even more than your former rich diet You somehow respect yourself more And your new bodily comfort far exceeds in satisfaction your hearty eating of former days

DIABETES

(Continued from p 13)

factors must be taken into consideration Actually blood sugar in association with urine sugar may exist without diabetes Thus tumours, degenerative changes in the body, brain injuries, and certain diseases of the heart may be the actual cause of both high-blood and high-urine sugar without the presence of diabetes. A careful consideration of other signs and symptoms is required

Blood lipoids or fatty bodies are now considered of even greater value than sugar in the diagnosis of diabetes The four lipoids—cholesterol, lecithin, glycerinesters, and cholesterolesters—are present in increased amounts in diabetes As the diabetes becomes more severe, they increase in amount

Sugar-tolerance tests are also valuable aids in the diagnosis of diabetes Easy to carry out, they give a valuable clue in doubtful cases First, the patient's fasting blood-sugar level is determined Then he takes one and two-thirds ounces of sugar in a pint of water, and the blood and urine sugar are estimated every half hour for two hours or longer In this way the power of the pancreas to deal with sugar is given a thorough test.

Every diabetic should know how to follow the simple procedure of testing his urine for sugar and acetone bodies The results of such tests will give him a good idea of his progress and guide the doctor in further treatment Benedict's test for sugar is the simplest and most accurate It is carried out in the following manner Take eight drops of urine in a clean test tube Add five cubic centimeters of Benedict's solution Boil vigorously over a gas or alcohol flame If sugar is present, the solution changes from a clear blue to a turbid-yellow or brick-red colour, depending on the amount of sugar present An approximate idea of the quantity of sugar may be gained by comparing the colour of the solution with a standard colour chart

Tests for acetone bodies are also quite simple To half a test tube of urine add one-half inch of the mixed crystals of ammonium sulphate and sodium nitroprusside Then add one-half inch of liquor ammoniae fortis, place the thumb over the mouth of the test tube, shake well, and allow to stand A characteristic purple colour means that acetone is present Depending on the depth of the colour, the amount of acetone may be estimated

Modern medicine has given the diabetic hope for a long and normal life, and is still seeking ways to give him more comfort, better health, and more efficiency

Each patient owes it to himself to keep up to date on treatment for his condition and to keep in touch with his doctor for best results. Much of his progress is in his own hands.

WHAT TO DO FOR SICK JOINTS

(Continued from p 7)

an arm straight out with a stiff elbow would be most awkward"

"Dr Barnard, do you think I shall ever be stylish enough to have gout? Not that I'm seeking more trouble!" Mrs Rockwell's face was lighted with an elfish grin her eyes glowed with fun Evidently for the moment she was free of pain

"That's quite unlikely Almost never do women have gout It's a disease reserved for the lordly male There are two kinds of gout —rich man's and poor man's Probably the first spells over-feeding, the second an unbalanced, defective diet"

"I remember when I was a little girl I used to read stories of gouty English gentlemen—always Lord So-and-So—who threw bottles and books at their patient butlers"

"Sounds very credible Most joint diseases are painful conditions, and the gouty are highly irritable when an attack is in full fire But then, practically all of us if we live to be elderly will have some joint trouble, which one might say is the result of the wear and tear of life Gout is a mild form of arthritis mostly limited to weight-bearing joints—knee, ankle and toe It's not crippling, and often appears around the age of forty, more often in men than in women It's not a matter of climate, for it occurs everywhere

"Dr Barnard, will rubbing the joints ease the pain? If it does my nurse may give me some massage"

"Massage and passive movements, which your nurse probably

was taught in her training, are not particularly indicated in rheumatoid arthritis Both are used, but always with the utmost gentleness and never enough to cause pain Heat is safe, and not likely to be over-used Bindings of wool flannel are agreeable in some cases, covering the affected parts

"Your nurse will see to it that you get the proper diet It will be her duty to see that the cook properly prepares what she orders Naturally it is taken for granted that you will get the usual daily requirement of vitamins I'll leave her directions in writing to cover that We can count on some vitamins in your diet Drink at least five glasses of water each day. Much starchy food only adds weight

"You should be exposed to direct sunshine for about twenty minutes each day, preferably without glass between you and the sun Glass cuts out beneficial light rays I have in mind for you a diet of about 1,700 calories a day, divided in three meals, at usual hours You will have no snacks late at night

"I will bring you a diet list giving the various vegetables and fruits That will allow variety This light diet is best for your age, weight, and small amount of exercise It is plenty for health Don't change this list It's doctor's orders—as is"

"Doctor, I am so eager to see improvement that I will follow your orders to the best of my ability

"Now, Dr Barnard, what shall I do about these little lumps around my elbows? They don't hurt What are they, and what can we do about them?"

"Mrs Rockwell, these lumps are merely one of the symptoms of rheumatoid arthritis. Also sometimes arthritics have a little psoriasis—in about three per cent of the cases"

"I've never noticed anything like that, doctor My skin appears to be clear, except those lumps"

"I am leaving you in good hands, Mrs Rockwell, for you have a dependable nurse I am counting on you to follow your programme closely And I will be back in a week"

The nurse showed the doctor to the door "Am I being too inquisitive, doctor," she said, "if I ask how you think Mrs Rockwell will make out?"

"Not at all. Mrs Chase Probably your personal plans involve some knowledge of how long such a case may take As a matter of fact, I don't know Sometimes these rheumatoid patients get well entirely on their own—spontane-

ous cures—perhaps one fourth of them Half of them recover in part without much crippling, which I believe Mrs Rockwell will do The remainder advance relentlessly to cruel deformity and much crippling

"Here is where you can be of vast help to her—and to me Keep her cheerful Keep her smiling Never let her get discouraged Talk to her of life as still something worth while

"When we take off some thirty pounds of that useless fat, she'll feel better, too But keep in mind that mental depression is definitely injurious to arthritic patients, it bogs them down to the very bottom

"Call me on the phone now and then and tell me of Mrs Rockwell's progress If we work together to give her the best possible chance, our efforts may result in better health for her"

BEAUTY AND HEALTH IN A BATH

(Continued from p 9)

has given orders that he must not exert himself, the home nurse will roll the gown as far toward the neck as possible and then slip it over the head to avoid tiring the patient

Pull down the upper covers and fold them over the foot of the bed without exposing the patient Cover the patient with one bath blanket, and slip the other bath blanket under him to protect the bed from dampness You may use several bath towels for protection of the bed if you do not have blankets free for this use See to it that the patient's feet are warm This is very important

You are ready now to proceed with the bath proper Wash the patient's face, neck, and ears, using careful, firm pressure to the face Rinse, and dry thoroughly with the face towel

Place the bath towel in readiness under your arm Saturate the washcloth with hot water and soap (soap cuts the oils on the skin) Wash the arms thoroughly, being careful to include the armpits Hold the washcloth firmly, allowing no corners to drag and irritate the patient Wash away the soap with the cooler water (cooler water favours reaction)

Note carefully the effect of the cool water If there is favourable reaction after this bath, the skin will glow and the patient will have a feeling of warmth If there is usually an unfavourable reaction, revealed by a tendency to chill, before the bath give a hot foot bath, a hot application to the spine, or a hot drink

After the brisk towel friction an alcohol rub gives a pleasant feeling of dryness If there is a tendency to oiliness of the skin, a brush of powder will add comfort If the skin is dry, especially in the chronic invalid where the skin shows lack of activity by its scaly appearance, an oil rub after the bath is helpful You may use any pure cold cream

The cleansing bath should not take longer than twenty minutes When it is finished, bring the bed-covers back up over the bath blanket Remove this blanket, then the lower bath blanket The patient is now in a dry bed Put on the clean, warm gown

When necessary, give a fever bath, using much the same procedure as for the cleansing bath but omitting the soap There is not the danger in exposure when the body is warm, so the fever bath may be a bit longer than the cleansing bath A larger surface can safely be bathed before drying than in the cleansing bath For example, the chest and abdomen may be bathed at the same time

In giving the fever bath, avoid friction in applying the water and in drying the patient The attending physician will usually order the temperature of the water to be used In many cases of fever, hot water is as beneficial as cold because the hot application brings the blood temporarily to the surface, encourages elimination, and hastens evaporation

A cold clammy skin, blueness goose flesh, shivering, and a chilly sensation are signals for the need of a hot sponge bath But a full pulse, flushed face, and hot dry or warm moist skin are signals for the need of a cold sponge Evaporation is a powerful cooling process

If you never had the pleasure of realizing how greatly appreciated these simple and most effective baths are, you have treat awaiting you

BOOK REVIEWS

We have recently received copies of *Sunshine,* a magazine for home, school, and college edited and published by Dr G S Krishnayya, Shivaji Nagar, Poona 5 We have looked through these copies and feel that we can recommend this magazine to our readers and will suggest that school and college librarians might write to the editor for a complimentary copy and thus decide whether they wish to subscribe or not

The magazine sells for eight annas a copy and Rs 5-8-0 per year

Dr Krishnayya is a man of a very wide educational background and experience and is bringing all of that background into the preparation and publication of this valuable little journal which we hope will meet with wide acceptance by the educational public of India

L J L

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Men Who Proved the Bible True—No. 7.

Digging in and Around the Holy City

W L EMMERSON

WE HAVE seen how in a most remarkable way the spade of the excavator has illuminated the Bible record of the patriarchs, the bondage of Israel in Egypt their eventual exodus, and their entry into the promised land

We may now ask what light archæology has thrown upon the later history of Israel in Palestine

One might naturally expect that as voices have spoken from the dust of Mesopotamia, Syria, and Egypt so powerfully in corroboration of the Bible story, excavation in Palestine would be the most rewarding of all But there are actually a number of factors against this

Palestine has been a highway of contending armies through the centuries in a way that Mesopotamia and Egypt never were Consequently, destruction has worked more havoc on the ancient remains in Palestine than in any other Bible land

Again, the dryness of the climate of Egypt and the Tigro Euphrates Valley has been favourable to the preservation of the remains of their ancient civilizations whereas the more variable climate of Palestine has resulted in the complete destruction of practically all literary remains except those on pottery or stone

Finally, the Hebrew conception of life after death excludes the possibility of finding any of the decorated and treasure filled tombs which have provided us with so much of our knowledge of the pagan civilizations of Sumer and Akkad, Egypt, Babylon, and Assyria

In spite, however, of the profound difference of conditions which the archæologist has met in Palestine compared with excavation in Egypt and Mesopotamia, the fruits of research there during the past century or so have been rewarding in a high degree

Jerusalem was naturally the first site for excavation, and one of the earliest tasks to which Sir Charles Warren set himself when he was sent out by the pioneer society, the Palestine Exploration Fund, was the identification of the site of earliest Jerusalem on the horseshoe like ridge over which the modern city is spread

Tradition had placed David's Zion on the western arm of the horse shoe and to this day the name clings to this area, but Sir Charles suspected that this tradition like so many others, was quite incorrect His suspicions were confirmed when he discovered an artificial tunnel of Canaanite construction some eight feet high and six to ten feet wide running up from the Virgin's Fountain in the Kidron Valley through the solid rock of the eastern arm of the horseshoe, called the hill of Ophel, to the summit of the ridge This was clearly a means of access from a fortress on the crest of the fortified ridge to the spring below without going outside the walls And this fortress could be none other than ancient Salem or Jebus

The final evidence that earliest Jerusalem stood on the hill of Ophel came in 1924, when Dr Duncan Garrow then head of the Department of Antiquities in Jerusalem uncovered a length of about one hundred yards of ancient Canaanite rampart still standing to a height of about twenty feet almost immediately above the Virgin's Fountain and dating back at least to 1600 B C This was clearly a part of the wall which encircled the original Jebusite stronghold which held out against the Israelites until after David became king

It was most probably up the "gutter" or water tunnel from the Virgin's Fountain that Joab and a selected band ascended to surprise the Jebusites (2 Sam 5 6 9, 1 Chron. 11 4-7), and it was through a breach in the Jebusite wall that David's final attack was launched

Interestingly enough, near the centre of the exposed portion of the

The Jews mourned over the ruins of Jerusalem

wall there is the base of a large square tower of Hebrew masonry This may have been the "Millo" (which means "filling") with which Solomon closed a breach in the city wall (1 Kings 11 27, 9 15, 24), or it may simply have been built as part of the general work of strengthening the fortifications of David's city

HEZEKIAH'S CONDUIT

During the reign of Solomon and after, the city spread from the original ridge of Ophel over the whole of the horseshoe hill crest and it was during the reign of Hezekiah that another tunnel was cut from the Virgin's Fountain through the hill of Ophel to the pool of Siloam in the Tyropæan Valley between the hills of Ophel and Zion inside the city (2 Kings 20 20, 2 Chron 35 2 4) Hezekiah's tunnel was first explored in modern times in 1838 by Edward Robinson and his companion and since then has been thoroughly surveyed on a number of occasions

When cleaned out by Captain Parker it was found, in places, to be as much as ten feet high, and here and there the hard chalk plaster used by Hezekiah was found adhering to the floor and sides

In 1880 an inscription was discovered near the Siloam end of the tunnel by an Arab boy who had accidentally fallen into the water while playing He reported his discovery to his teacher, Dr Schick, and when later examined by Dr Sayce of Oxford University and Dr Guthrie of the German Palestine Association, it proved to have been cut in the rock by the workmen of Hezekiah to record how, tunnelling from both Siloam and the Virgin's Fountain, they at last met in the centre of the rocky hill and the waters flowed from the spring into the city pool

TUNNELLING IN THE TEMPLE AREA

Within the confines of the city, excavation has been seriously hampered by the fact that the whole area is built over and densely populated As a result, most of the work of investigation has had to be done by tunnelling

We know that the area of the Moslem mosque, or Haram es Sheriff, covers the site of Solomon's temple and its two successors, that built by Ezra, and the third built by Herod, but true to Jesus' prophecy, not one stone has been left upon another (Matt 24 2), so that their respective plans can no longer be traced

The well known Wailing Wall of the Jews with its massive blocks of Israelite masonry near the south western corner is practically all that remains visible of the wall of the temple area, and dates back at least to the time of Herod The stones themselves, which are early Israelite bossed masonry, may well have been re-used from the temple of Ezra, or even of Solomon

The galleries beneath the pavement at the east end of the mosque area may have originally been the stable where Solomon kept his 40,000 horses, as the old Horse Gate would readily have given access to the

If this is so, Solomon's palace must have stood in approximately the position of the mosque of el Aksa. Actually, the Jews still call this building, "el Aksa Midrash Shelomo" or the "School of King Solomon"

The first temple erected upon the threshing floor of Ornan purchased by David (2 Sam 24 18-25), occupied approximately the position of the present Dome of the Rock in the centre of the Haram area Under the dome of this mosque, as the name

implies, an outcrop of rock some sixty feet square protrudes above the pavement to a height of four to six and a half feet This is believed by many to represent the original threshing floor and the site of the holy of holies of the temple

The trouble which Paul got into by taking Trophimus the Ephesian beyond the barrier excluding all but Jews from the inner courts of the temple (Acts 21 27, 28), is explained by a stone warning slab found in a house on the north side of the temple area by M Clermont Ganneau in 1871 and now in an Istanbul museum It states that "no foreigner may enter within the balustrade and enclosure around the Sanctuary," and that "whoever is caught will render himself liable to the death penalty, which will inevitably follow"

HEROD'S PALACE AND PILATE'S PRÆTORIUM

On the west wall of Jerusalem is a fortress usually designated David's Tower This has nothing to do with David, but it does have associations with the Jerusalem of Jesus' day for it was along this western wall that Herod built his great fortress-palace and to the north of it three great defensive towers—named Hippicus, Phasæl, and Mariamme after a friend, his brother, and his wife respectively—to protect this most vulnerable side of the city In the walls of David's Tower are a number of

The spade of the excavator has, in a remarkable way, illumined the Bible record.

...sive Herodian stones which may ... a part of the tower of Hippicus The one time Turkish barracks to ... north of the Haram area is undoubtedly the site of the prætorium occupied by the Roman governor of Jerusalem and his garrison in the time of Christ In the buildings on the other side of the Via Dolorosa, which traverses the prætorium area, is an ancient pavement of typical Roman slabs one to two and a half feet thick

Beneath this pavement are great cisterns where water was stored for the garrison, and scored in the pavement are a number of geometrical figures on which the game of marbells common among the Romans, was played by members of the garrison when off duty No doubt this was the courtyard across which Jesus was taken by Pilate to be offered, with Barabbas, to the people

Still spanning the Via Dolorosa is one arch of a triple entrance to the prætorium where Jesus may have stood on the fatal occasion when the Jewish rabble demanded His crucifixion Hence it is known as the "Ecce Homo" arch

POOL OF BETHESDA FOUND

Jerusalem had many pools or reservoirs in both Old and New Testament times, several of which are referred to by name The Pool of Siloam in the Tyropæan Valley has long been known, but only in this century has the *Pool of Bethesda* been located

It was known from the Bible account to be near to the Sheep Gate, which is represented by the present St Stephen's gate, and some years ago two hitherto unknown reservoirs were found beneath the Convent of St Anne connected with each other and surrounded by columned porticos These answer so clearly to the twin pools of Bethesda that the identification is now generally accepted Thus from among the mass of tradition—often most fantastic—which has accumulated through the centuries in old Jerusalem, archæological investigation has, in spite of all the difficulties, been able to unearth much factual material enabling us to picture with considerable accuracy the successive cities of Jebus, of David, and of the time of Jesus, and help us to understand better the momentous events which took place in them through the centuries

YOU CAN ESCAPE!

ERNEST LLOYD

THE WISH to escape, 'to get away from it all" is a very common one in these days of stress and strain There are many men and women in every walk of life who desire to escape from the monotony of their programme When day after day they take up what to them is the same weary drudgery in home, office, or factory, then sooner or later will come the rebellious hour when the mind will crave release

Then there are those who wish to escape from *themselves* But as we grow older, and perhaps wiser, we discover that wherever we go we have to carry our hearts with us What we really need, therefore, is not so much a change of scenery and circumstances, but a change of *self*

Dr G H Morrison writes in his book, *The Unlighted Lustre,* "Men often blind themselves to facts, and weave theories to make the burden lighter They speak of sin and death and poverty and care in a way that is irreconcilable with facts It is not truth they are seeking, it is ease They want the world to be golden, though it is full of sorrow and leaden eyed despair Remember there is cowardice of mind When men turn away from the straight gaze of Christ, and when they turn to philosophies and theories which have no cry *in them, and no cross,—only* harmonious and flattering music,—that is another betrayal of the strange longing to escape"

Millions of men, women, and youth foolishly try to find their escape through physical indulgences, and thereby become entangled in far worse circumstances But there are good ways of escape which God has provided for His children, and these bring comfort, peace, and enduring satisfaction

The fundamental provision which God has made for our escape into true freedom and the abundant life is the gift of His Son He came in human flesh to show us *how* to escape One of the best proofs, by the way, of the divine origin of the gospel of Jesus is in its wonderful adaptability to the universal need, for everyone wants larger freedom, release, and escape And that is exactly what Jesus promises and gives to 'whosoever" really accepts His way of escape and follows Him

In the eighth chapter of John's Gospel we find the Lord Jesus talking to His listeners about the bondage of sin, and His offer of help to make them free In the thirty-sixth verse He tells them plainly that if He, the Son of God, "shall make you free, ye shall be *free indeed*" Truly free, forever free He is not talking about freedom from the galling Roman yoke but from something far worse—the bondage of sin

Sin is a killer In its countless forms it plagues, wearies, weakens, and destroys It is largely responsible for the desire to "*escape*" But the only real escape is through the acceptance of the loving invitation of the Lord Jesus to put our lives into *His hands and thus find true peace* The deepest want of man is not the desire for happiness, but a craving for peace of mind and heart And it is this that the Lord Jesus offers us "My peace I give unto you Let not your heart be troubled" John 14 27

The peace that the Lord Jesus gives to those who accept Him as their personal Friend and Guide is the antidote for worry It is superior to outward circumstances It knows no fear of man or of the future Blessed are they who carry with them the peace and comfort that the Lord Jesus gives—the peace that nothing can take away

Every day, from one end of the earth to the other, the Lord's Prayer is read or prayed in more than 1,100 languages by Christians of every denomination.—*Marc Boegner.*

YOU AND THE BOOK

LIFE ONLY IN CHRIST

Alma L Tibbs

1 Genesis 1 26, 2 7, Job 4 17—Man was created in the image of God He was however, formed of the dust of the earth, and is by nature mortal

"And God said, Let us make man in our image, after our likeness" "And the Lord God formed man of the dust of the ground, and breathed into his nostrils the breath of life *'Shall mortal man be more just than God?*

2 Romans 5 12 Through disobedience, the first man and his companion brought sin and its reign of death into the world

'Wherefore as by one man sin entered into the world and death by sin, and so death passed upon all men, for that all have sinned"

3 Genesis 3 23, 24 After sin had entered into the world God barred man's access to the tree of life for had he been able to partake of its life-sustaining fruit, sin would have been perpetuated in the universe and God's ultimate purpose defeated

"Therefore the Lord God sent him forth from the Garden of Eden to till the ground from whence he was taken So He drove out the man, and He placed at the east of the Garden of Eden cherubims and a flaming sword which turned every way to keep the way of the tree of life

4 Ecclesiastes 3 19 20 At death man does not go to some distant, fanciful place of abode instead the same happens to him that happens to animate beings lower in the scale of creation

For that which befalleth the sons of men befalleth beasts even one thing befalleth them as the one dieth, so dieth the other yea they all have one breath so that a man hath no pre-eminence above a beast All are of the dust and all turn to dust again'

5 1 Timothy 6 14 16—Immortality is possessed only by the Deity

"That thou keep this commandment without spot, unrebukeable until the appearing of our Lord Jesus Christ who only hath immortality, dwelling in the light which no man can approach unto, whom no man hath seen, nor can see to whom be honour and power everlasting Amen"

6 Romans 2 5 7—Man is to seek immortality

"God will render to every man according to his deeds to them who by patient continuance in well doing seek for glory and honour and immortality, eternal life'

7 Ephesians 2 8 10—Eternal life is the gift of God

For by grace are ye saved through faith and that not of yourselves it is the gift of God not of works lest any man should boast For we are His workmanship, created in Christ Jesus unto good works which God hath before ordained that we should walk in them

8 2 Timothy 1 10 Through the vicarious death of Christ on the cross of Calvary and His resurrection from the dead the gift of eternal life to a fallen race has been made possible

But is now made manifest by the appearing of our Saviour Jesus Christ who hath abolished death and hath brought life and immortality to light through the gospel'

9 Colossians 3 4, John 1 4—Christ is the Source of all life

When Christ who is our life shall appear then shall ye also appear with Him in glory' In Him was life, and the life was the light of men

10 John 3 36 Only those who believe in Christ and His atonement for men's sins on Calvary will receive eternal life

"He that believeth on the Son hath everlasting life and he that believeth not the Son shall not see life, but the wrath of God abideth on him"

11 Revelation 22 14—This faith must be accompanied by obedience to the commandments of God

'Blessed are they that do His commandments, that they may have right to the tree of life, and may enter in through the gates into the city"

12 Acts 4 12—Aside from faith in Christ and obedience to His will there is no other way of obtaining eternal life

"Neither is there salvation in any other for there is none other name under heaven given among men, whereby we must be saved

13 Romans 6 23—Those who refuse the gift of God will die in their sins

"For the wages of sin is death

14 Proverbs 8 36—Those who will perish will do so because of their own fault, and not because God is unjust

'But he that sinneth against Me wrongeth his own soul all they that hate Me love death

15 1 Corinthians 15 51 53 The righteous will receive the gift of immortal life at the resurrection of the just

Behold, I show you a mystery we shall not all sleep, but we shall all be changed, in a moment in the twinkling of an eye at the last trump for the trumpet shall sound and the dead shall be raised incorruptible, and we shall be changed For this corruptible must put on incorruption and this mortal must put on immortality"

16 Revelation 22 1, 2—In the new earth the redeemed will have access to the tree of life, whose fruits will forever perpetuate life

"And He showed me the tree of life which bare twelve manner of fruits, and yielded her fruit every month and the leaves of the tree were for the healing of the nations"

17 Revelation 22 17—All heaven unite in pleading with man to accept God's gift

'And the Spirit and the bride say, Come And let him that heareth say Come And let him that is athirst come And whosoever will, let him take the water of life freely"

Paris on the 14th of July Picture shows fireworks over SACRE COEUR

Photo [illegible]
Courtesy Consulate General of France, Bombay

TELEVISION IS GROWING FORCE IN EDUCATION By focussing a miniature television camera on the eye piece of a light microscope American students view the enlarged microscopic field on a television receiver screen Laboratory experiments are shown more clearly and to more students by using television

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The Oriental Watchman and Herald of

HEALTH

46th YEAR OF PUBLICATION

Contents

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L J LARSON, M A , B Sc , Editor

DUNBAR SMITH, M D, D N B, D T M & H (LOND) — Associate Editor

J B OLIVER, M D, D T M — Associate Editor

OUR COVER

They that worship God merely from fear,
Would worship the devil too, if he appear

Photo Central Railways

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Minute Meditations

THE STORM DOOR

D. A. Delafield

BILL and Helen almost came to words over the storm door.

It was midwinter, and the chill wind blew into the house whenever the front door was open; besides, the heat constantly leaked out through the cracks around the door Naturally the oil bill was mounting and so was Helen's temper

"Bill, why don't you put up the storm door? It will take you only a few minutes and it will keep the house nice and warm Besides, it will save us a lot of money on the fuel bill."

"Very well, Helen. When I get home from work tonight I'll fix it."

You know what happened. That night Bill was too tired to fix anything The next night he and Helen had a dinner appointment And the next—well, there was one TV show he had to see. Besides, Bill thought, Helen shouldn't nag at him. He knew the storm door needed fixing.

Bill was a typical husband. True, not all husbands are like that, but there are some who habitually put off fixing storm doors, installing washers in dripping faucets, patching the leak in the roof and fixing the smoking furnace—things that make life uncomfortable in a home

Perhaps you have had a storm-door experience We all learn in time that we can't neglect simple duties without running the risk of irritation If anything needs fixing —fix it and fix it now. Make that a motto. When you see a sagging gate swinging on one hinge, a brown patch in a lawn that needs re-seeding, spindly rosebushes that ought to be pruned or a shat-

(Continued on p 5)

The Editor Says

JUDGING by what we see wherever we go in Southern Asia, it is quite safe to assume that most people believe the so-called "soft" drinks to be perfectly harmless. We refer, of course, to the carbonated water "cool" drinks to be found at almost every eating place, wayside stand, cross-roads, railway station and bus stop.

However, for many years, medical organizations such as the American Medical Association, through its Council on Foods and Nutrition, have been trying to tell the people that they may not be altogether correct when they assume that such drinks are harmless. It is only fair to add that this attitude is supported by the research of independent chemists, physiologists and clinicians.

There are three main charges made against these beverages which we think worth while to consider. They are:

1. Some of the drinks contain drugs which are potentially harmful.

2. Most of these drinks have a chemical reaction which is strong enough to possibly injure certain organs, particularly the teeth.

3. Bad or injurious dietary habits may result from their constant use.

Readers of this journal know that for the past forty-six years we have been consistently advocating the non-use of coffee and similar drinks. This has been our policy because we have known that these drinks contain harmful substances. Coffee, for instance, contains caffeine. And so do some of the so-called "cola" drinks.*

Caffeine is a very valuable drug when properly used as a nerve and heart stimulant. However, like other potent drugs, it is capable of producing undesirable and even dangerous effects under certain conditions. For example, caffeine increases gastric secretion and, therefore, its use is highly undesirable in patients with peptic ulcer.

Other persons develop severe vertigo (dizziness) from the use of drinks containing caffeine. Some are hypersensitive to such drinks and cannot take them at all. In all fairness we should state that this is usually from the abuse of coffee rather than the "cola" drinks.

Of course, as mentioned earlier, substances containing caffeine can also be harmful in certain conditions and physicians accordingly advise against the habitual consumption of such substances. Well qualified medical men commonly believe that the excessive use of the drug during childhood has a deleterious effect. Dr. B. Spock, for example, thinks that children should be limited to not more than one bottle of "cola" drink per day. While Dr. Blumer states it to be his conviction that even in their teen ages children may be over-stimulated by "cola" and other caffeine-containing drinks.

But, it is not our purpose here to single out the so-called "cola" drinks as a target in this discussion. Let us consider the chemical reaction of the soft drinks (carbonated water) in general.

It has been experimentally proven in rats that the habitual use of such drinks has resulted in the erosion (washing away) of enamel and dentine of the teeth and it is claimed to be a hazard to man. Human teeth suspended in "cola" beverages gradually lost their calcium in two weeks. However, we must remember that there are natural secretions in the human mouth which may act as buffers against the eroding influence of such beverages and there are other possible factors which might cause such calcium erosion, so we must be cautious about ascribing such action to carbonated drinks. It is known, however, that these drinks do increase the acid content of the urine. This may be either good or bad, depending upon the individual. On the helpful side carbonated drinks are useful in providing an easy way to get children to take liquids.

Let us now proceed to the third and last phase of our discussion. Nutritionally, the soft drinks raise several problems. Soft drinks usually contain sugar. The use of the drinks may thus reduce the appetite at regular meal time. Sometimes also children will spend their food money for some such drink instead of buying some nutritious food containing essential vitamins and minerals. This is also true of workers in industrial establishments. Often during rest periods they will consume such drinks and thus subject themselves to both the caffeine effects and the nutritional effects due to sugar consumption. (The same might be said of tea though it contains certain other drugs as well.) It should be added

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* In America "cola" drinks contain approximately 2/3 of a grain of caffeine per six ounces of beverage. In Holland such drinks contain from 1/3 to 1 3/5 grains per eight ounces of beverage. We do not know at the present writing what the caffeine content of "cola" drinks manufactured in India is.

that carbonated water drinks are often produced and bottled under highly unsanitary conditions While we do not have clear evidence that they are involved in the transmission of infectious diseases, they certainly are not above suspicion

Now what should or can be done about the soft drink problem? We will list three suggestions

1 The public needs to be educated, specially parents and young children, regarding the possible dangers resulting from the excessive use of soft drinks

2 In the case of foods intended for human consumption, most countries now have laws requiring that the contents be noted on the label or container This should also be required for beverages such

(Continued on p 7)

The Storm Door

(Continued from p 3)

tered windowpane—do something about it. Fix it. It will take only a moment, and it may add many happy hours to your home life

Think of how serious chronic neglect may become.

Your glasses need replacing They aren't doing you much good any more—too weak. But you postpone a visit to the oculist, and then one night—a dark night—you drive your car into a truck. Six weeks in the hospital gives you plenty of chance to think over how foolish neglect can be.

An aching tooth, a chronic pain in the side, frequent headaches, may be signals that some diseased organ needs fixing. See your doctor. He may be able to straighten you out before the trouble becomes serious.

If anything has gone wrong, it ought to be fixed, whether little or big—whether in the home, the heart, the head, in any area of human experience. Fix it. If you don't, it may fix you. Neglect is dangerous.

WHAT'S IN THE NEWS?

Chopping up onions or garlic is found to cause an allergic skin rash on the hands of some housewives Similar allergies are reported in some people who handle tulip or narcissus bulbs, hyacinths or jonquils, says Dr J W Burks, Jr, in "Annals of Allergy"

* * * *

To treat some cancers, Ohio State University Medical School researchers are weaving radioactive thread into the diseased area The thread is hollow nylon tube, the size of a large darning needle, containing small amounts of radium, gold or other radioactive substances The nylon is flattened into the shape of a ribbon and 'darned" into the cancer area. After a week or so, it is removed. The method is useful in treating cancers of the neck, tongue, cheek and the area under the breast bone, Dr Ulrich K Kenschke told the Radiological Society of North America.

* * * *

Exercise is far more useful than people think as a reducing aid or for maintaining normal weight It is a misconception that exercise doesn't cost you much in calories And it is a misconception that exercising makes you so hungry you over eat and lose the benefit of the exercise Recent research gives physical exercise an important role in maintaining normal weight and avoiding obesity, said Dr Jean Mayer of the Harvard School of Public Health

* * * *

Push buttons bring you magical services in a new hospital bed, one named for its surgeon inventor, Dr Marvel Beem of Los Angeles One button brings a wash basin with hot and cold running water and regular drain from beneath the bed to the side Another makes a section of the bed slide off to one side, and a built-in toilet appears Other buttons make the bed rock for exercising, bring trapeze bars into position so a person can move himself about raise the head or feet to desired positions Still other buttons perform other services Time study engineers estimate the mechanical bed can save 46 per cent of a nurse's time. The first bed was installed at Stanford University Hospital, San Francisco, donated by the manufacturer

* * * *

One dislocation of the shoulder seems to make a person susceptible to the same trouble later on The more severe the first dislocation is, though, the less chance there is of a recurrence, Drs Edwin French Cave and Carter P Howe of Boston told the American Academy of Orthopædic Surgeons From a study of nearly 500 cases, they found second dislocations occurred in 92 per cent of children aged ten to 20, and 57 per cent of all patients regardless of age The chance of recurrence appeared less if the shoulder was kept in a cast at least three weeks

* * * *

The tropical forests of Venezuela and Brazil have what are called "cow trees" These unusual trees yield a white nutritious sap that is almost indistinguishable from true milk. The National Geographic Society reports that it can be drunk as it comes from the tree, used in cooking, or even made into cream.

* * * *

Marco Polo was born in Venice 700 years ago Before his life was over he was privileged to see and write about sights that Western eyes did not see again for 600 years, reports the National Geographic Society The stories he told of the East's fabulous treasures and its people who devised a far flung postal service, paper money, fire alarms, gold-plated teeth, and even dehydrated milk were disbelieved by his own countrymen Along with his father and uncle he became wealthy in the court of Kublai Khan, the Mongol emperor As intelligence officer, young Marco fulfilled confidential missions in every part of the empire He was appointed governor of Yangchow at 23, and later a member of the Crown Council

* * * *

It is reported that until the age of 12 the average child's shoe size changes every four to eight weeks After 12, the change varies from every 12 to 16 weeks

What Your TOOTH PASTE *Does*

PAUL SAWYER, Ph.D.

Tooth paste is big business. What's in it for you?

TOOTH PASTE is almost as truly an American institution as baseball. Although it did not originate in the United States (about 2,500 years ago the Greeks were using some kind of dentifrice), it had its first blossoming about a century ago, and its popularity has since steadily increased. Last year Americans bought an estimated $150 million worth of paste, powder, and liquid.

Just what did you get for your money? Are your teeth brighter? Do you have fewer cavities? Is your breath sweeter? Just what does the mixture of soap (or sometimes a detergent), glycerin, and chalk, made more palatable and pretty by a flavour and a colour, do for you?

A tooth paste cleans your teeth. More accurately, it helps a toothbrush to clean them. The soap contained in the paste tends to loosen some of the impurities clinging to your teeth.

A tooth paste helps to brighten your teeth. One of its ingredients is an abrasive (chalk) that removes some of the stains when rubbed against the teeth. The best dentifrice for you should include just the right degree of abrasiveness. Too much is as harmful to the teeth and gums as too little is ineffective.

A tooth paste can sweeten your breath temporarily by masking halitosis (bad breath) and by dislodging some of the odour-producing bacteria in the mouth. But it should be remembered that halitosis is rarely a result of unclean teeth alone. It is much more often a disease of the mouth, pharynx, or sinuses. It is frequently associated with faulty digestion of fatty acids and other volatile substances. These conditions are too serious for treatment by dentifrices. A United States Public Health Service report states that "none of them will cure bad breath, pyorrhœa, or any other disease." However, proper mouth hygiene and general health habits tend to prevent such conditions.

A tooth paste leaves a pleasant flavour in your mouth. A recent American Dental Association survey revealed that many more Americans select a tooth paste for its taste and after-taste than for any other quality. Pleasing flavour is the great advantage professional dentifrices have over the home-made variety of baking soda or powdered salt. These amateur concoctions do the work as well, but they don't taste as good.

One important thing a tooth paste does for you is make you conscious of dental hygiene. Its gaily coloured tube, its fresh aroma, and its appealing advertisements showing lovely smiling girls and handsome smiling men with gleaming teeth are powerful psychological forces that make you want to care for your teeth.

Now for what a tooth paste cannot do for you. It cannot replace the tooth-brush. Dr Leonard S. Fosdick, professor of chemistry at Northwestern University of Illinois School of Dentistry, stressed at an American Dental Association convention that "the tooth-brush, properly used, does more to keep the teeth and gums healthy than any medicine or chemical put into tooth pastes and powders."

A tooth paste cannot replace a dentist. His personal inspection at periodic intervals (twice a year is suggested), followed by such treatment as he deems necessary, is the best possible insurance against any grave mouth disorder.

A tooth paste cannot significantly reduce the number of cavities in your teeth. Indeed if it could, ninety-seven out of every hundred Americans would not have one or more decaved, missing, or filled teeth. Experts are not sure they understand how cavities are produced and not too many claims may be made for prevention or cure of a

Govind Lal

Train your children from their earliest childhood days to care for their teeth and much of the pain and discomfort of decayed teeth will be avoided

disease whose cause is not yet definitely ascertained

The most commonly accepted theory on tooth decay blames certain bacteria, the lactobacilli acidophili Lying on the less exposed parts of the teeth, these bacteria utilize the sugars and starches you eat, forming acids These acids destroy the protective coatings of enamel and dentine of the tooth, finally uncovering the centre to infection

Although not all scientists denounce lactobacilli acidophili as the chief villains, all are agreed that bacteria play a prime role in the formation of tooth-wasting acids Thus the fight against decay as waged by dentifrice manufacturers has become a fight against these tiny organisms The weapons are new, and their results cannot yet be fully determined The manufacturers are sincere in their effort to find a substance that will be beneficial to teeth They hoped that ammonia would kill the offending microbes and aid oral hygiene in several other ways Its chief proponent and discoverer, Dr Robert G Kesel, says conservatively now that he hopes clinical evidence will indicate that the use of ammonia in a dentifrice "will be helpful in a modest reduction of decay"

Penicillin in tooth paste is not of proved value No extended series of tests has demonstrated that it is successful in conquering tooth decay It should always be handled carefully, for it may cause a sensitivity reaction, may lead to certain mouth infections, and may build up a resistance in the body to itself so that it cannot be employed for life-saving purposes

Latest in the succession of mouth-hygiene substances are antienzymes Two compounds—Sodium Lauroyl Sarcosinate and Sodium Dehydroacetate—inactivate the enzymes, which are produced by bacteria in the mouth The enzymes accelerate the change of highly concentrated carbohydrates (especially sugar) into acids The scientific father of the antienzymes, Dr Leonard Fosdick, has cautioned that there is not sufficient information available yet to prove their effectiveness

The American Dental Association is conservative in regard to all these substances They reserve their decision, knowing that the products have not yet been fully tested for effectiveness

Brushing your teeth, preferably within a few minutes after eating (before the acids have had a chance to do their destructive work), is important If it is impossible for you to brush your teeth after a meal, rinse your mouth thoroughly with water You will do your teeth greatest service if you cut down on sweets and eat raw, hard fruits and vegetables, which keep the teeth clean and massage the gums Soft, sticky food often means weak teeth See your dentist regularly Get out of your tooth paste all it has for you, and what it can't do for you, good healthful foods will

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THE EDITOR SAYS

(Continued from p 5)

as the cool drinks we are speaking of Since so many people use them, their purity is a matter of public concern and the manufacturers should not be permitted to use substances which are known to be harmful

Producers of carbonated drinks intended for human consumption should also be required to maintain certain minimum standards of cleanliness and sanitation in and around their bottling works

3 Further research should be made concerning these drinks so that factual evidence can replace conjecture in dealing with this subject Teachers, societies, medical organizations, civic, sanitary and health organizations and other interested groups could well give thought to the problems involved Up to the present, there has been much conjecture and much talk but very little controlled scientific investigation

KIDDIES LEARN WHILE PLAYING

ROBERT L. CARL

Children should develop in hand, heart, and head as they enjoy their toys.

"LARRY, can't you play with your toys? Mother has to get dinner now." Throughout the world the familiar problem of directing children's interests perplexes some mother almost every day that rolls around.

Perhaps Larry doesn't enjoy the toys he has to play with. Many children do not find pleasure in their toys. Often parents do not understand the importance of play and toys. They may wish expert advice in the supervision of play or guidance in choosing the right plaything.

When you are toy shopping, ask yourself whether the toy you are considering for your child is going to afford him opportunity to develop manual or bodily skill. Does it stimulate his artistic and emotional expression? Is it suitable for a child of his age? Is it so complicated that your youngster might easily become discouraged in trying to use it as intended? Is it sturdy enough to last as long as the child's interest in playing with it?

A vital factor in choosing a toy is the amount of time a child is expected to play alone. And there is the question of how to train him to be willing to play by himself. Merely forcing a child to remain alone for long periods of time is not fair to him in his mental and social development. Also, you will want to keep in mind that the attention of small children is necessarily limited.

You will want to avoid arousing stubbornness through enforced periods of solitary play too long for a child to tolerate. Your youngster will respond happily if you re-appear from time to time with a suggestion for some new way for him to play. Merely by your appearance you are re-assuring him that he is not condemned forever to solitary confinement.

The right kind of toy helps a child learn how to use his mind and body. It teaches him to share and get along with others. Choose a toy in relation to the physical abilities of a child, whatever his age may be. Before his school years begin he must learn to use his big muscles. He is not ready to handle materials requiring the co-ordination of fine muscles. That work is developed and improved throughout adolescence.

The parents should recognize that the fine muscle development of a two-year-old is at a minimum and that he will want and need things related to the use of large muscles. Wooden steps, a small climbing apparatus and large blocks help to develop co-ordination.

During the early pre-school days the family furniture probably will come in for a beating. Why not provide the child with a sturdy chair of the right size that will provide great sport when he pushes it around? This activity also aids in the development of walking. A small wheel-barrow will give the child much fun, besides allowing him to exercise.

Picture books fill a very real need for children over two, especially picture books about the familiar objects associated with their everyday life. Young children, particularly, prefer trains, automobiles and animals to the fanciful and the faraway, which have no immediate meaning to their lives.

By means of the captions and simple texts carried by picture books you may begin early to read aloud to a child. Read slowly, giving plenty of time for conversation and comment.

B Ranganathan

When choosing toys for your children, select those that will afford them an opportunity to develop manual or bodily skill.

An important factor too often overlooked in child training is the cultivation of his sense of touch Sand and water are exciting to a youngster Even the feel of grass under tiny bare feet holds a thrill Soap bubbles, soft dolls and animals, clay, finger paints and mud pies allow him to exercise his sense of touch Mention to him how soft his woolly bear is, how firm his moulding clay Guide his thinking, don't leave his development to chance

Phonograph records fascinate children from a very early age But the two-year-old will be interested only in very simple music Later you will wish to provide him more elaborate compositions

If music is a normal sound around the home the child may derive pleasure from it without giving much sign As he grows old enough to move around under his own power, note his reactions to music

Choose music often with clear, incisive rhythms, smart pace and simple melodies Gay folk songs and marches are ideal A joyous movement from a Mozart serenade and the sturdy, foursquare momentum of a Bach composition will appeal to a youngster Vary the spirited music with calm, soothing melodies that will be restful to his nervous system He cannot be constantly stimulated any more than you can

If a child's life is full of opportunities for getting about and exploring his home, and if he has materials and toys in his room for creative experiences, he may to a large extent be left free to express himself as he wishes Toys grow meaningless if they are not constantly supplemented by experience

When parents realize that toys have a positive and intrinsic value, the plaintive cry of "Can't you play with your toys?" will gradually disappear from the household Success with a child depends on your enjoying that child Toys are materials by which he will experiment and learn much about the fundamental nature of the world he lives in

But remain alert yourself Don't allow him a hit-or-miss training, strong in one point and weak in several others Plan that he shall develop symmetrically—in body, mind and spirit Make sure that he learns unselfishness, thoughtfulness toward others and consideration for other children and for adults See to it that he becomes self-reliant, courageous and honest

Make playtime a happy, relaxed learning time

Have You Got

THE FIRST OF TWO ARTICLES

IF we say that there is in this country and in most of the civilized world a vast ring whose business and purpose it is to poison for profit the great mass of humankind, it might be too much for you to believe. If we should say that this purpose is being all too successfully accomplished you might say "Preposterous!" If beyond all this we should go so far as to say that the health and lives of millions are being destroyed by this business making many other catastrophes pale into insignificance—you might think we had lost our reason. Yet the evidence indicates that to be true without the slightest degree of over-statement.

How is it possible, you ask, in these days of scientific discovery, of public health departments and laws, of hygiene and sanitation, of physical training in public schools and of general enlightenment, for such a crime against the public welfare to be carried out? And of course, you wish to know what the poison is.

Tobacco it is, and tobacco it has been for generations. But the effect of the poison on people is becoming more acute with each passing year. Some will say, "How silly! Of course tobacco isn't exactly good for a person, but tobacco smoking is only one of the minor vices. I have known plenty of people who lived to a ripe old age, yet they smoked heavily most of their lives."

Well, so have we all. And this proves precisely nothing, except perhaps that such people are unusually tough.

But don't think for one minute that we would make such a serious indictment of tobacco without good evidence to back it up.

A few years ago Dr. Raymond Pearl, late professor of biology of Johns Hopkins University, made a series of large-scale, long-term observations on smokers and non-smokers to determine whether tobacco had any influence on length of life. He selected 1,905 heavy smokers, 2,814 moderate smokers and for a control group 2,094 non-smokers—a total of 6,813 men entirely unselected except on the basis of their tobacco habits. This number is considered adequate for studies by life insurance mathematicians. He found that survival rates for 100,000 men in each category beginning at the age of thirty were as follows:

	Non users of Tobacco	Moderate Smokers	Heavy Smokers
Beginning at 30 Years	100 000	100 000	100,000
Surviving at 35 Years	95,883	95 804	90,943
" " 40 Years	91 546	90 883	81 191
" " 45 Years	86 730	85 129	71 665
" " 50 Years	81 160	78 436	62,699
" " 55 Years	74,538	70,712	54 277
" " 60 Years	66 584	61 911	46,226
" " 65 Years	57 018	52,082	38,328
" " 70 Years	45,919	41,431	30,393

From this breakdown we see that there were about 50 per cent more survivors at seventy among the non-users of tobacco than among the heavy smokers. The heavy smoker has only about two chances of reaching sixty to the non-smoker's three. About 37 per cent of heavy smokers' deaths between the ages of thirty and sixty could have been postponed if they had not smoked. Such facts cannot be disregarded.

> Never call tobacco smoking a trifling habit. Its effects are serious, not slight.

How does tobacco kill? Its effects on the body are widespread and show up in many ways. The small boy who takes his first smoke can tell you some of them.

Remember the time you tried to be just like Daddy and the other grown-ups, and you lit your first cigarette? The first few puffs irritated your throat and made you cough and the tears came to your eyes as the smoke was wafted into them. But you kept bravely on until you had completed the first one. Not much happened so growing bolder you decided to try another. You rapidly caught on to the art of manipulating that little old cigarette and soon you could smoke like an old-timer with dive for out-of-doors and conchalance. After a short time you didn't feel so non-chalant. A queer, woozy dizziness began to come over you. Something in the midriff didn't feel quite right. Then, oops! you made a quick dive for out-of-doors and considered yourself lucky that you arrived in time. You didn't have any time to lose, at that.

But somehow the effects didn't pass off as soon as you could have

SAND in your GEARS?

JAMES J. SHORT, M.D.

Tranlal K Patel

The effect of the poison in tobacco on people is becoming more acute with each passing year The effects on the body are widespread and show up in many ways

wished Mother's call for supper met with the usual response—in reverse All you wanted just then was to be left alone on your bed to ease your misery If only the walls and furniture would stop going round! And when Mother came to investigate you saw two mammas instead of one But you were able to make out the knowing smile on Daddy's face

You made a lifetime resolution there and then Never again! And you kept that resolution too—for eight long years

Now let's change the scene for a trip to the hospital A young man of thirty-six is lying ill in bed while two doctors, one a surgeon and the other a medical specialist, discuss his case

"Doctor, I don't believe in whittling The leg must come off well above the knee An amputation below the knee will only mean a higher amputation later because of failure of the stump to heal"

This was the surgeon's opinion in the case of the young man, whose foot was affected by ascending gangrene The blood vessels were badly closed at the foot and ankle, but fair circulation below the knee was still present The pessimistic reply to a suggestion of lower amputation was based on wide surgical experience with the condition known medically by the fearsome name thromboangiitis obliterans It means "an inflammation of blood vessels with blood clotting and stoppage of circulation"

The sufferer was greatly discouraged at the dismal prospects of the future without his leg His misery resisted all attempts at consolation as he thought of a promising career in salesmanship cut short by his calamity His resources had already been badly drained by a chronic progressive illness of months' duration Bleak despair settled over him as he thought of his wife and two children

To add further to his mental anguish, the doctor had to warn him that if he did not take precautionary measures his left leg, already similarly affected, would soon go the way of his right The doctors advised several measures, but one was given as an absolute, unconditional demand and ultimatum he must give up smoking, or else——

Thromboangiitis obliterans is found almost exclusively in men

(Continued on p 30)

BIRTH-MARKS and CANCER

MOLLEURUS COUPERUS, M.D.

Watch that mole! Don't fall victim to cancer through neglect or irritation of a skin blemish.

TWO SKIN specialists in Duluth, Minnesota, made a survey to determine the number of people in their city who were free from moles They found that only one person in a hundred did not have any dark moles In other words, ninety-nine out of a hundred people in Duluth have one or more dark moles in their skin Other investigations show that the average person has at least twenty such dark-coloured moles

For practical purposes we may say that everybody has one or more birth-marks This word *birth-mark* is a somewhat indefinite word, and may cover quite a range of skin abnormalities These vary from small brown discolourations of the skin to unsightly hairy growths, large areas of dark warty skin, and disfigurement of large parts of the body There are two main types of such birth-marks that are common enough to be of interest to everyone

One is a growth formed by blood vessels, called an angioma, which is present at birth or soon afterward These blood-vessel birth-marks may be flat and purplish in colour (called port-wine marks) or red and elevated, resembling a strawberry or raspberry Still another type lies deeper in or under the skin It is called cavernous angioma

As soon as one of these birth-marks is noticed, particularly the strawberry type, the child should be taken to a physician Birth-marks of this type tend to grow rapidly, and are most responsive to treatment when they first appear These angiomatous birth-marks are practically never cancerous But they may grow to a large size, and for the sake of appearance they should be treated The port-wine-stain birth-mark is best covered with some appropriate cosmetic The deep cavernous angiomas are treated in various ways, depending on their location and size

The other more common and also the more important type of birth-mark is a mole The colour of a mole is produced by a black pigment called melanin These moles may vary from jet black to flesh colour Nearly all people have a number of these pigmented moles, some of which are flat and dark but others are elevated and usually lighter in colour and possibly contain long, coarse hairs

Are these moles only blemishes, a disfigurement, usually insignificant? Or are they of greater consequence? Superstition has attached all kinds of weird causes and meanings to moles, none of which contains a grain of truth Because they are so easily visible they have been the subject of continued investigation from the beginning of scientific medicine

It has been clear to doctors for many years that this group of pigmented moles is, in reality, made up of four different types, each with its own distinct features as to appearance, microscopic structure, and likelihood of becoming cancerous Among these four types of moles the ones that interest us most are the darkly pigmented, brown or black in colour, usually flush with the skin, non-elevated or only slightly raised

This type of pigmented mole should be looked upon with a great deal of respect, for it may give rise to one of the most malignant types of cancer that afflicts the human family, the melanoma, named after the melanin pigment it contains Millions of people have these pigmented moles, and in only a comparatively few do these dark moles develop into cancer

Do we know what might cause one of these moles to become malignant? We do A large percentage of them do so if they are irritated or rubbed by clothing, tools, opposing skin surfaces, chemicals, or anything that inflicts minor injury to the mole It may require many years of such irritation before malignancy starts in a mole, or it may be a single injury

Not long ago I saw a woman who had recently developed a rapidly growing bleeding tumour on one of her legs She had had a black mole there all her life, and a few months before I saw her she had taken a needle and punctured

Don't neglect or irritate moles, birth-marks or other skin blemishes Consult your physician and he will advise you on the proper care you should take

the mole repeatedly to see whether it would disappear Four weeks later the mole began to enlarge, and it developed later into the rapidly growing tumour When the tumour was examined microscopically after its removal it was found that the pigmented mole had changed to a malingnat melanoma Daughter tumours had already been carried to other parts of the body All this apparently resulted from one single injury to the original pigmented birth-mark

As the result of many years of observation, physicians have laid down definite rules about possible prevention and early diagnosis of these melanomas The legs and feet are the most common site for the origin of these malignant tumours from pigmented moles, and melanomas are the most common cancer to involve the skin of the legs All flat, darkly pigmented moles on the feet and legs should be completely removed, particularly from the soles of the feet and the toes If possible this should be done in childhood, before adolescence, for it is very rare for a pigmented mole to become truly malignant and spread to other parts of the body before puberty

Since repeated irritation is one of the main factors that induce a mole to become malignant, doctors advise that all pigmented moles so located that they are continually rubbed by tight-fitting garments, such as at the belt line, the brassiere area, the shoulder-strap area, shirt-collar line, and shaving area, should be removed

Any pigmented mole anywhere that is getting larger or begins to bleed or ulcerate should likewise be removed By early removal, malignant degeneration in a mole may be prevented or diagnosed early if present, which is essential if a cure is to be obtained No one should ever pick at, squeeze, puncture, or otherwise irritate a pigmented mole

The non-pigmented fleshy moles, so commonly seen on the face in middle-aged persons, rarely become malignant They are usually removed only to improve the appearance But if these moles show rapid growth, bleeding, or ulceration, they are then exactly of the same nature as pigmented moles undergoing such changes, and must be treated in the same manner by thorough surgical removal

Your regular yearly or half-yearly physical examination will pay off when it comes to birth-marks They allow your physician to watch these marks

DEVANAGARI CAN NOW BE TYPE-SET

(Continued from p 2)

of the Fotosetter also works for the benefit of the Indian printer Where a font of hand type contains 1,000 characters, the problem of maintaining an adequate supply of type on hand becomes tremendous

On jobs where reprinting is necessary, maintenance of standing forms requires an enormous—and often impossible—investment in type and storage space for the printer Most often the printer has to re-distribute the type after composing and printing an eight-page brochure or pamphlet The Fotosetter provides an inexhaustible supply of type which can be keyboarded

Besides, types for the Devanagari script have always required 750 to 1,000 basic characters, as compared with nearly 100 for English Manufacturing so many characters is expensive In the new intertype machine the number of Devanagari basic characters has been reduced to 175

The greatest potential for Fotosetter in India is its probable role in combating mass illiteracy by providing low-cost reading materials at a price the low-income group can afford to pay

In years to come the Fotomat technique may include other Indian languages, such as Bengalee, Gujarati, Gurmukhi, Assamese, Oriya, Tamil, Telugu, Malayalam, Kanarese, all of which are based on or are closely allied to Sanskrit Also adaptable to the new system are Arabic, Persian, Urdu, Sinhalese, Burmese, Siamese, Cambodian, Javanese, Chinese, Korean and Japanese Thus the ancient languages of the East will get a new impetus from a new, modern process invented by the West

WHAT'S

STOMACH ulcer is a modern malady brought on by the frustrations and furious living of present-day civilization It is the disease of the scientist and the writer, the doctor and the businessman Most of all, it is a disease following on the modern fast pace of getting things done

Although the fundamental cause of peptic ulcer is not known, no doctor nowadays denies that ulcers are more common where worry and fretfulness exist In England and Germany at the time of the blitz bombings, peptic ulcer reached proportions that may be considered epidemic

Mostly in the stomach and duodenum—in every place where gastric juice flows freely—peptic ulcer takes its greatest toll

It is simple to visualize the beginnings of an ulcer as they take place in the stomach The lining of the stomach and intestine should be regarded as a thin layer, much like the skin, but protected by mucus It is a sort of slimy skin In the ulcer's earliest stages it is much as if the skin was rubbed off as when a child falls and scrapes his knee or elbow With the skin rubbed off, the acids in the stomach can do additional damage, they can burrow deeper A small hole, or crater, is formed, just like one you would see if look ing down the inside of a miniatur volcano The mouth of this crate may be much smaller than a fou anna bit, or it may grow an extend to the size of a rupee o larger

In a very real sense a peptic ul cer is a condition in which the juice of the stomach turn against them selves The lining tissue, which i designed to protect a person fron his own digestive juices, break down In peptic ulcer, the commo expression, "What's *eating* you?" has a real and special meaning

It is easy to understand why th ulcer victim suffers much pain an discomfort Shortly after eating meal, when the digestive process i at its height and the outpouring o acid is at its greatest concentra tion, the patient may experience gnawing, burning pain in the pi of his stomach Sometimes the pai will go away after a while by itself only to recur after the next mea or to awaken the patient out of sound sleep during the night

When food is taken it absorb and neutralizes some of the gastric acidity, and in this way brings about some relief of pain Typi cally, the ulcer victim's discomfort is worse a few hours after a mea than at other times Some relief i

Pressure

Diet

Work

Worry

Emotional Disturbances

Stomach Ulcers

EATING YOU?

JOSEPH D. WASSERSUG, M.D.

Stomach ulcers plague us often in this hurry-worry world of today. We must learn to relax.

obtained by drinking a glass of milk or taking a few antacid tablets Alcohol, sometimes nothing stronger than a single glass of beer, makes the pain worse For some of the victims, coffee is as bad or almost as bad as a high-ball It stimulates the acid-secreting cells of the stomach to greater activity, causing additional discomfort

Bill Rollings' case is a typical example He runs his own advertising agency, and though his outfit is not large, employing only eight people, he has several important clients, including department stores and manufacturing businesses, which he feels he must keep Bill is not only energetic and resourceful but a tireless worker At night after the others have gone home from the office he stays around until nine or ten o'clock looking over layouts, checking correspondence, and writing letters to entice new clients to join his organization On week-ends he brings his dictating machine home from the office and spends part of his time doing additional work

For a man only thirty-eight years old, Bill is already having much discomfort For the past six months he has had to stop his work in the middle of the day and get a milk shake and a few antacid tablets In fact, you hardly ever see Bill without his antacid tablets You can always find him with either a cigarette in his hand, a cocktail, or some patented medicine that is touted as a quick relief for "acid indigestion"

Until Bill learns to slow down, he is not going to find any permanent relief Even at the early age of thirty-eight he is no longer running his advertising agency It is running him, and he is already being throttled by it—not at his neck but at the pit of his stomach His agency (or his temperament) is eating him alive If he continues at his present pace he is going to be forced to slow down because of continued pain and disability Bill has to learn now how to keep his worries out of his stomach and out of his mind

Within the past few years psychiatrists have had much to say about the frustrations, anxieties, complexes and conflicts that lead to the development of peptic ulcer On one hand there may be over-ambition, on the other, the tendency to smart and brood over supposed insults or even slight real insults The patient with peptic ulcer is a victim of his own emotions

There are various ways for the peptic ulcer sufferer to overcome his disease The first thing he must do is realize that the problem does not lie with any individual dietary indiscretion but rather with his own personality and mode of living Since no diet is able to change a person's fundamental characteristics, it is important for the ulcer victim to realize that caring for himself and his condition is a *lifetime* job It is not a case in which he must stay on a very sharply restricted diet for a short period of time, get over his pain, and then return to his older poor dietary habits Rather, he must remain on a modified deitetic programme for the rest of his life And he should study how to take life more calmly, without overdoing at any time

In addition to a bland diet devoid of hot spices and irritating foods, the ulcer sufferer usually needs some quieting influence to soothe his nerves and induce a relaxed mood A warm bath at bedtime is recommended Hot foot baths should give much help, for they pull the blood from the brain and induce a tranquil mind A heating pad at the crucial spot on the back relaxes nerves and gives relief from tension To relax the nerves directly, with no after-effects, give the most relaxing treatment of all—hot fomentations to the spine for ten to fifteen minutes

Bicarbonate of soda should not be used in this connection because of its effect in stimulating an additional outflow of acid a short period after its neutralizing effect

What is needed for the peptic ulcer victim is not a single medicine but a total programme of treatment that includes relaxation for the nerves as well as relief from the pain of the ulcer in the stomach He can learn to take life moderately, for his own good

When someone next asks you, "What's eating *you*?" try to remember and take those words seriously That question alone may spare you countless hours of suffering and distress It is better to eat your food, enjoy it, but never let anything eat you.

The Mystery Malady

PSORIASIS

ROBERT P LITTIE, M D and BERNARD RAYMOND, Ph.D.

WHAT is this skin malady with the forbidding name psoriasis (pronounced sori'asis)? The word means "a scaly eruption" Typically this rash consists of dull red or pinkish patches covered with flakes of skin It occurs on the elbows, the back of the arms, the knees, the front of the legs, the small of the back, and the scalp Some patients have itching, but it is not always present

If the scales of skin are pulled away, they leave behind small spots of hæmorrhage In other words, the skin capillaries are left without their normal protection, pointing to a disturbance in the make-up of the skin itself rather than a simple surface infection

A typical accompaniment of psoriasis is a minute pitting of the fingernails Doctors often make a diagnosis of psoriasis from the nails alone years before the disease appears elsewhere in the skin

A competent skin specialist had this to say about psoriasis "In the psoriatic patch the skin cells do not cement themselves together properly but remain friable [crumbly] and loose Psoriasis is a healthy man's disease As a rule the general condition is unaffected Morever the outlook for the skin is very hopeful In nearly every instance the eruption can be dispelled"

It is true that psoriasis, like the common cold, tends to recur, but no one maintains that colds are incurable However, unlike the common cold, psoriasis is not contagious In years past it was imagined that the disease was hereditary, but the skin specialist we quoted declares that not one case in ten shows any definite family connection, and that so far as marriage is concerned psoriasis may be ignored

It is a disease of cold, damp, sunless regions It is rare in the tropics, but a minor curse in Scandinavia The rash tends to clear in summer Sun bathing and sea bathing are beneficial

In winter the ultra-violet lamp can substitute for the sun, but we emphasize that home medication can be hazardous, especially when the trouble is acute In such cases energetic treatment may cause a dangerous flare-up and lead to a chronic condition affecting the entire system Such complications have been known to prove fatal But fatal cases of psoriasis are so rare they are almost a sensation in the professional world

Although described by Galen before 799, the disease remains a medical mystery to this day, perhaps for the very reason that it is not too serious It has been thought that the trouble is related to a skin condition accompanied by greasy

If you notice a scaly eruption on any part of your body, don't try any home medication for that can be very hazardous

scales, called seborrhœa It is a fact that the two diseases often merge. Dealing with a disease without a known cause is most difficult

The hazards of psoriasis are mostly psychological The patient commonly fights his disease and resents it, not less because he guesses his doctor is as much in the dark about it as he Although relapses are almost the rule, it is hard for the patient to accept them Worry has actually been known to cause a flare-up of the eruption You can add psoriasis to the diseases influenced by the mind

Treatment should be in the hands of the patient's physician Although it is possible to clear up psoriasis quickly and easily with X-rays, the very ease of treatment is *dangerous*, for the patient may fail to report that X-rays have been used before In consequence, an over-dose may be given, with irreparable damage Only a trained skin specialist with full knowledge of the amount of X-ray previously used should be trusted with X-ray treatment

Some claim is made for a low-protein diet in treating psoriasis One doctor said, "Psoriasis responds with complete cure on a low-protein diet with abundance of fruit, low-protein alkaline-ash vegetables, and much lemonade and orange juice before or between meals Eczemas in infants and children also respond to the same diet, only that leafy vegetables cannot be used Baked or mashed potatoes may be used for infants or adults"

Alcohol as a beverage is always bad in psoriasis And the patient should give special attention to his scalp If it is made free of greasy scales and dandruff, psoriasis may not soon recur

Psoriasis patches can often be rendered less conspicuous by scrubbing off the scales and applying flesh-coloured powder Many physicians disguise the patches with calamine lotion

We cannot emphasize too much that the treatment of psoriasis should be in the hands of a physician, preferably a skin specialist Self-medication may be dangerous The doctor may use coal tar, various other ointments, and ultra-violet light, but rarely X-rays Finally, experienced physicians warn that false hopes should not be aroused by press reports Reserve judgment until the news of another treatment has been confirmed

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DIET AND CANCER

A meat-free diet may be one way to avoid cancer, for cancer research has been handicapped by the rarity of cancer found in monkeys, and monkeys are vegetarians

According to Dr Paul Steiner, pathologist on leave from the University of Chicago, now at the National Cancer Institute at Bethesda, Maryland, the instance of cancer in monkeys is very rare Reports from zoo autopsies performed on monkeys who have lived and died in captivity show that tumours and cancers are almost unknown In one colony, however, in the University of Chicago, scientists developed cancer of the tongue and mouth in some monkeys Even so, other monkeys in the colony had no cancer

Although the scientists offered no explanation for this resistance of monkeys to cancer, it may possibly be that a diet restricted to fruits, vegetables, whole-grain cereals and other non-animal proteins may be the answer For monkeys live on fruits and other non-meat foods exclusively

"BRIEFCASEITIS" THREAT TO EXECUTIVES

An executive's brief case should never make the trip home with him, according to Dr Harry J Johnson, medical director of Life Extension Examiners Dr Johnson, a New York physician who has counselled ten thousand executives through the years, feels that that little "handle in the hand" is dangerous

Executives with "briefcaseitis," says Dr Johnson, work too long hours while the rest of the working world is slowly learning to work less and less For mental workers the 9-to-5 day is plenty, he advises

Most companies treasure their machinery, but they still haven't learned to pull executives off the

(Continued on p 24)

YOUR CHILD'S I.Q.

HAROLD SHRYOCK, M D

Success is measured by what you do with what you have, not by what you have

ONCE upon a time a schoolboy was transferred to the "retarded class" because he had made a low score on an intelligence test His parents were horrified with this transfer, for they had supposed that he was perfectly normal But, worse still, they were soon informed that he was not doing well even in the retarded class This was more than they could take, so they requested a re-check of the intelligence test

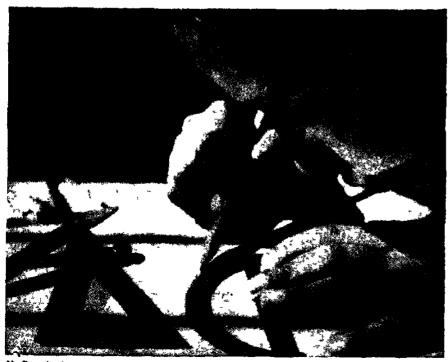
The re-check revealed that the teacher who had scored the test had made a simple error in calculating The boy's actual intelligence was much better than indicated by his false score on the test But still he was doing poorly in competition with his retarded classmates

This outcome points up the important fact that intelligence as measured by the intelligence test is only one of several factors contributing to success The intelligence test measures intellectual capacity A person with a high intelligence may put it to good use, or he may allow it to go to waste The boy having difficulty keeping pace with his retarded classmates was not using his mental equipment to good advantage

He observed that relatively little was expected of those in the retarded class Typical of normal boys in general, he reacted by producing no more than was expected In order for him to readjust successfully, he would have to be convinced that his intelligence was perfectly adequate and he should therefore buckle down to his assignments with determination to succeed

An intelligence test is more than just another examination Its questions and problems were tried out on thousands of persons before they were assembled in the form of an intelligence test In fact, many more questions were used in the preliminary experiment than in the finished test Only questions that proved to be valuable for measuring intelligence survived the early study

When persons who were known to be good students did well on a certain question and persons who were known to be poor students did poorly on the same question, it found its place among the questions that can be trusted to differentiate between high and low intelligence When in the preliminary study a certain question was missed by good students about as many times as it was missed by poor students, it was cast out as not suitable

An intelligence test in the making has to be modified revised and re-worked until it provides a valid differentiation between persons of high intellectual

N Ramakrishna

A child's fundamental intellectual ability increases year by year as he grows toward adulthood.

ability and persons of low intellectual ability

A good intelligence test also indicates various intermediate degrees of intelligence. For convenience, the figure 100 is chosen to represent a person with average intelligence A rating of more than 100 indicates super intelligence An intelligence quotient of 150 is unusual, and indicates a true genius Figures between 80 and 100 indicate dull intelligence Figures of less than 80 indicate feeble-mindedness

A child's fundamental intellectual ability increases year by year as he grows toward adulthood A nine-year-old boy has greater ability to learn than a seven-year-old boy has And when the nine-year-old turns twelve, he is capable of intellectual accomplishments considerably beyond his nine-year-old capacity Intellectual capacity levels off at sixteen or eighteen years of age A person continues to learn, of course, throughout his life But his fundamental *ability* to learn does not improve after he is about eighteen years of age

In providing an accurate system for measuring the intelligence of a child, we must make adequate allowance for his age And this allowance for age is the reason for using the term "intelligence quotient" (I Q) In calculating a child's I Q, we compare his actual performance with the performance of average children at his age If he performs better than the average child does, his I Q is higher than 100 If he performs more poorly than the average child does, his I Q is correspondingly less than 100

Once a child's I Q has been accurately determined, it may be figure throughout his life We expect the child who has an average intellect at six years of age (I Q of 100) to perform as an average child when he reaches the age of ten (I Q of 100) or the age of 14 (I Q of 100) We expect the child with a superior intellect to remain superior for the rest of this life (I Q above 100), except as disease or accident may injure his brain

The Scriptures contain a parable pertinent to the subject of intelligence

"For the kingdom of heaven is as a man travelling into a far country, who called his own servants, and delivered unto them his goods And unto one he gave five talents, to another two, and to another one, to every man according to his several ability, and straightway took his journey

"Then he that had received the

(Continued on p 29)

N Ramakrishna

Children should be given every opportunity to learn by doing

KIDDIES' KORNER

THE CROW THAT TEASED THE PIGEON

ETTA W. SCHLICHTER

SILVER and Sambo were acquaintances, but not very good friends. Silver was a carrier pigeon and Sambo a pet crow, always in mischief. They lived on a farm where there were other pigeons, most of them very tame.

Silver was the special pet of Harriet Mayfield, a young schoolteacher who taught in a village some thirty miles away and came home for week-ends. Silver would perch on her shoulder and eat from her hand.

Whether Sambo was jealous or simply bent on mischief, Harriet did not know, but the minute he would spy Silver receiving attention, he would fly down and worry her. Gentle as the proverbial dove, Silver would not fight back, but only try to escape. Sambo, perhaps sensing how far he dared go, contented himself with darting down at her or prancing around when she alighted on Harriet's shoulder or was receiving any special attention.

One of Sambo's favourite tricks was to untie strings. If any of the family sat on the porch, he would fly down, seize an end of a shoelace in his beak, and tug at it until it became untied, a habit that amused the family and was not always appreciated by visitors.

To turn his attention from shoestrings, Harriet fastened some bits of tape to the clothesline and let him tweak at those until he pulled them off.

"Something will have to be done about Sambo," said Mrs. Mayfield one day when Harriet returned from school. "He is such a nuisance and torments poor Silver to death. He got hold of the little blue ribbon you put on her neck last week and jerked it off and frightened the poor bird. She couldn't get away from him till he'd untied the bow."

"We can't get rid of Sambo," said Harriet. The crow was just as great a pet as the pigeon. "But I guess they ought to be separated. How would it do for me to take Silver to school? I believe I could keep her with me, and even if she wouldn't stay, she'd come straight back home. It wouldn't hurt to try."

Accordingly, on Sunday evening, Silver, shut in a comfortable crate, rode along with Harriet in her little car to the village where she taught school.

In the morning Harriet let her fly about the room for a few minutes before giving her her breakfast in the crate. She wouldn't risk letting her out of doors till she had become acquainted.

It was almost school time when Harriet's landlady came in with the morning paper.

"Harriet," said she, "did you come over the Sandy Creek bridge last evening?"

"Yes."

"About what time?"

"Half past seven."

"I thought so. Well, it went down at eight o'clock with a heavy truck on it, and several cars were wrecked."

"It's in the paper?" cried Harriet, and she read the glaring headlines. "Oh, dear! Father and Mother will see this paper and be worried to death. Mother is always so nervous about my driving alone. I always send her a card as soon as I get here, but the paper gets there before the mail. What shall I do? Mother will imagine everything horrible, for the paper doesn't tell who were in the wrecked cars."

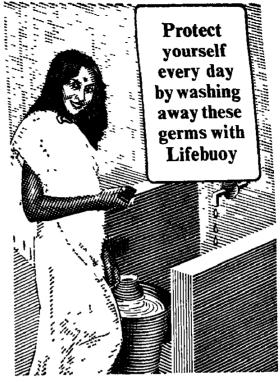
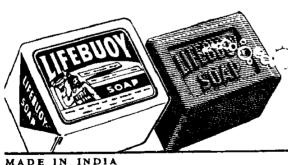
"Can't you telegraph?" asked the landlady.

"You don't know rural telegrams," laughed Harriet. "They reach the station on time and are sent out by the first neighbour that happens along."

Her glance fell upon Silver. "Why, Silver," she cried, "you're just the messenger!"

She glanced at her watch. Almost schooltime. She had never been late. Hastily she took a scrap of paper and wrote on it, "Arrived safe." She snatched a silver locket from a box, put the bit of paper in it, then running a bit of narrow blue ribbon through the ring in the locket, she lifted Silver from the crate, and with fingers trembling with haste, tied the ribbon about the bird's neck, opened the window, and let her go. With pride and satisfaction she noted that the pigeon, with unerring instinct, was headed in the right direction.

Not until she was hurrying to school did a thought strike her. "Dear me!" she said to herself, "I only tied that ribbon in a bow. I should have tied it in a hard knot. Oh, well! I'm sure it will stay tied. It won't take Silver long to get back, and Mother will be almost sure to notice her. She'll probably fly right down to the kitchen window."

No Silver appeared at the kitchen window, however. It was a particularly jubilant "Caw, caw!" that caused Mrs. Mayfield to look out toward the barn. There on a corner of the roof, to her great surprise, she saw Silver. The poor bird was struggling to escape the

crow, who was holding on tight to what seemed to be a string about the birds neck

Mrs. Mayfield hurried out just in time to see the pigeon fly to the comb of the roof, while Sambo, with something in his beak, flew down into an apple tree, in the crotch of which they had learned he had a treasure chest where he stored odds and ends that he picked up If a thimble or a bit of jewellery was missing, or a bright button or a dime, it was quite reasonable to look for it in Sambo's hiding place in the apple tree

Silver had had nothing around her neck when Harriet had taken her away There was a meaning in this Alarmed, Mrs Mayfield rang the dinner bell to call her husband from the field He came running

No, the house was not on fire

(Continued on p 24)

LESTER H. LONERGAN, M. D.

Discusses

TRICHINOSIS

TRICHINOSIS is related to the eating of pork. It is caused by the larvæ of a tiny worm known as *trichinella spiralis,* which are eaten in raw or under-cooked pork. When such meat is eaten, the adult worms quickly develop in the intestinal tract. The female worm burrows through the intestinal lining and discharges a new crop of embryos into the lymph spaces. These new forms in turn are carried into the blood stream, then to all parts of the body, but especially to the voluntary muscles. In the muscles these larvæ produce inflammation, and are finally walled off by dense tissue. The individual cysts formed in this way are barely visible to the naked eye. A single gramme of voluntary muscle tissue may contain thousands of these parasites.

We find it difficult to believe that trichinosis is a major health problem when we hear so little about active cases. Yet it is true. Some medical authorities tell us that the United States has the greatest trichinosis problem of any country in the world. In the past fifty years they have made very little progress in the control of this disease.

Repeated surveys show that about one and a half per cent of the hogs brought to market are afflicted with trichinosis. Dr. S. E. Gould estimates that the pork produced in one year furnishes about two hundred servings per person in the United States. Now see what this means. Since one and a half per cent of all hogs are infested with trichina, then Americans consume an average of three servings of trichinæ-infested pork every year. During his lifetime of about sixty-four years the average American consumes two hundred meals of pork containing trichinæ. Of course proper processing or cooking of the meat will have killed the living trichinæ and prevented infestation. But remember it requires only a single meal of raw or under-cooked pork containing these living organisms to produce the infestation in man.

If this disease is so common in swine and so easily acquired simply by eating of under-cooked pork, then why do we not more commonly see active cases of trichinosis in man?

The fact is that this disease is very common in the United States—far more frequent than we had supposed. Most of the cases are comparatively light, and go entirely unrecognized. However, in accurate surveys of thousands of autopsies in various localities in the United States, the disease has been shown to be present in 16 per cent of the cases examined, or in one out of every six. Still more careful study has revealed as many as 36 per cent, more than one third infested with this parasite.

How may trichinosis be recognized? Because the infestation is so light in most cases, obvious symptoms may not be produced. But we must admit that in many cases the trichinosis infestation produces symptoms that we fail to recognize as being related to this disease.

A few days after the infested meat is eaten, the patient has an "upset stomach" with abdominal pains, produced by the injury to the intestinal lining as the larvæ are burrowing through it. These early symptoms, possibly resembling those of acute food poisoning, usually fail to arouse much suspicion. The current diagnosis is seldom made unless several persons are involved or the symptoms become so severe as to require that the patient be sent to the hospital.

It is when the larvæ migrate to the muscles—about the second week—that the physician is usually first consulted. At that time the most characteristic features of the disease develop: fever and chills with general weakness, swelling of the eyelids and muscle pains, especially in the calves of the legs

These may become excruciatingly severe. Most bizarre nervous disorders may also appear, usually clearing up within a short time, but sometimes becoming permanent

In the heavily infested person the severe effects just described may continue for five or six weeks, gradually disappearing as the body gets used to the invaders Occasionally, vague muscle pains may persist for a year In about 6 per cent of the cases that come to a doctor's attention, death results from damage to the lungs, kidneys and heart muscle

The results of treatment for trichinosis have been discouraging indeed No specific treatment is known for the cure of trichinosis after the parasite has been taken into the body Every measure tried to date has completely failed to cure the disease—including X-rays, radium and numerous drugs Of course, in the first five to seven weeks of infection, while the parasites are still within the intestinal tract, purging or active catharsis may help to get rid of some of them But once the larvæ have become imbedded in the muscle tissue, they are there for life About the most that can be expected from the use of drugs is to relieve pain, or modify the reactions the body tissues would normally develop against these invading organisms

Recently cortisone and ACTH have been used to modify the actute symptoms of trichinosis But neither of these drugs can cure Actually, we do not yet know the mechanism by which these new drugs exert their effect They seem to alter the natural reactions of the body tissues to infection without actually destroying the invading micro-organisms Although the disease tends to run its ordinary course, the usual symptoms are to some extent suppressed when cortisone and ACTH are used

Prevention is the main factor in trichinosis. That seems easy It

When you eat pork containing live "trichinella spiralis" larvæ, you are very likely in for trouble

must not be as simple as it appears, else it would have been accomplished long before this

In the United States at the present time trichinosis is quite uncontrolled There this disease in hogs is nearly three times as frequent as it is in Canada, one thousand five hundred times as frequent as in Germany, and two thousand times as frequent as in Copenhagen, Denmark For the population generally, we recognize that the prevention of the disease in man consists essentially in the complete elimination of the disease from hogs "Processed" pork products such as sausages, which are customarily eaten without cooking, if prepared in plants under government inspection, may reasonably be expected to be free of living trichinæ But only 70 per cent of the pork in the United States is prepared in Federally inspected plants Furthermore, these protective regulations apply only to the processed pork The label "U S Inspected and Passed" on non-processed pork is no assurance whatever that the meat is free from living trichinæ All non-processed pork prepared in plants under Federal inspection and, of course, all pork products not Federally inspected (which includes the larger part of the total pork supply in the United States) may contain living trichinæ, and if eaten without adequate cooking, may cause illness or death

Trichinosis is a major health problem which is caused by the larvæ of a tiny worm found in the flesh of the pig.

What are the specific measures you can take to avoid the danger of contracting this disease?

I wonder whether you have read the simple instruction given by one of the greatest scientists and hygienists the world has ever known Listen to this message from the pen of Moses writing under inspiration thirty-five hundred years ago concerning swine

"Of their flesh shall ye not eat, and their carcass shall ye not touch, they are unclean to you" This plain statement should not be regarded as an arbitrary prohibition, but rather as an effective safeguard for the health of the people that a loving God was calling to serve Him And never in the centuries intervening to the present time has the nature of the hog, the scavenger of the animal world, been changed in the least Obedience to this instruction would certainly be the most effective measure in the control of trichinosis in man

We must face the fact that those persons who would be willing to eliminate pork from their diet are comparatively few Most people will continue to use pork What can be done to protect them from this disease?

Three principal methods have been tried in the control of trichinosis First, the microscopic inspection of pork was given extensive trial in Germany, and succeeded in almost eradicating the disease there In the United States this method was used for about fifteen years, up to 1906, for pork to be exported This provision was necessitated, according to Dr S E Gould, by the virtual exclusion of American pork from European markets

For pork to be eaten in the United States, microscopic inspection has never been required Objections raised against the method are that it is too time consuming to be practical, and too expensive More valid objections to this method, however are that sometimes the trichina of infested pork may not be detected, particularly if the larvæ in the tissues are young and transparent Then too, even though the specimen of pork examined is entirely free of trichinæ, the larvæ may be abundant in other meat from the same animal Hence, this method is generally considered quite unreliable

The chances of infested pork passing microscopic inspection are too high Is there not some more sure method?

The hog becomes infested in the vast majority of cases simply by eating scraps of uncooked and infested pork present in garbage Three States New York Kentucky and Oregon have adopted the plan of cooking all garbage fed to hogs No doubt cooking garbage would greatly decrease the incidence of trichinosis among hogs thus fed

But even among the grain-fed hogs the incidence is nearly 1 per cent, and this method would not eliminate the infection in them Furthermore, among the small swine raisers the enforcement of such a law is practically impossible In the States that have adopted this method, the difficulties of enforcing the law have rendered it quite ineffective Such a large corps of sanitary inspectors would be required that this method is considered even less practical than microscopic inspection

The third method has been advocated before by some authorities Kill the parasites in the pork Heating to a temperature of 137° F is the point specified by Federal regulations for processed pork Freezing will also kill the trichinæ, provided the temperature is held as low as 50° F for twenty days, or at zero for seventy-two hours

The effective control of trichinosis, however, is the responsibility of the consumer himself As pointed out by Dr R E Ober, "Uncooked pork, regardless of the source, and regardless of whether it has been inspected by federal, state, or city authorities, must be considered unsafe unless properly cooked"

But why eat such a dangerous food? There is an abundance of pure foods Grains, fruits, nuts and vegetables constitute the diet chosen for us by our Creator These foods prepared in as simple and natural a manner as possible, are the most healthful and nourishing They impart a strength, a power of endurance and a vigour of intellect that are not afforded by a more complex and stimulating diet

Only when we are intelligent in regard to the principles of health can we be fully aroused to see the evils resulting from an improper diet Those who see their mistakes and have courage to change their habits will find that the process of improving their diet requires much perseverance But when they form correct tastes, they will realize that the use of food they have formerly regarded as harmless was slowly but surely laying the foundation for disease

For your own sake change to pure foods

"Briefcaseitis"

(Continued from p 17)

treadmill for a "grease job"—a periodic physical check-up, says Dr Johnson

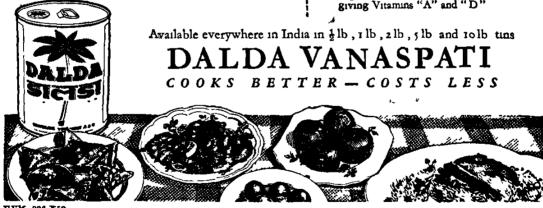
Most executives, especially the younger ones who have not reached the top, are "victims of themselves" Finding themselves "kicked upstairs" before they are ready for the responsibility, many are unable to stand the pressure Yet they are unwilling to "step down" As a result, they work harder and longer, often bringing the office home in their brief cases to keep up the required pace Actually the management would be wise to consult with the man before promoting him Both have a great deal at stake, and the management should not penalize a man for refusing an advancement

A periodic check-up as advised for executives would discover the trouble early enough to do something about it, thus prolonging the life and work of the executive Both the management and the executive would benefit

Although the management loses when an executive dies, it also loses immeasurably in money and morale when an executive is ill

THE CROW THAT TEASED THE PIGEON

(Continued from p 21)

He heard the story of Silver's return and Sambo's trick, and quickly got a ladder to find what

the crow had put in the tree As he was adjusting it, the rural carrier came with the paper Mrs Mayfield noted the big headline Perhaps this was the very accident she was always fearing, an accident to Harriet as she was driving alone She shook so that she could not read

Mr Mayfield reached in the tree and drew out a handful of rubbish He lifted a piece of blue ribbon from which dangled a tiny locket, and dropped it to his wife

Mrs Mayfield opened it A folded paper not much larger than a postage stamp was inside

"Arrived safe," she read

"That mischievous Sambo will have to be taught somehow not to torment our little Silver," said Mrs Mayfield as they rejoiced over the message "She's worth a dozen of him Still, we can't do away with the scamp"

"No," said her husband doubtfully, "I guess we'll have to manage some other way"

Sambo alighted upon his shoulder with a self-satisfied "Caw!"

HOMEMAKERS' HELPS

RECIPES

Walnut Roast

One cup bread crumbs; 1 cup cooked rice; 1 cup nuts; 1 cup milk or water; 1/4 teaspoonful sage and thyme; 2 tablespoonfuls browned flour; 2 tablespoonfuls shortening; 2 tablespoonfuls chopped onion; salt to taste.

Heat shortening in pan, add onion, cook until soft but not brown Add flour, nuts, parsley and savoury Add milk Lastly add bread crumbs and rice Bake in moderate oven until brown on top, about 45 minutes

Pressure Cooker Nut Loaf

Four thick slices bread; 1 cup crushed walnuts; 1 large onion; 1/2 teaspoonful cummin; salt; 1/2 cup thick tomato puree.

Soak bread in water for 15 minutes Braise onion, walnuts cummin and salt together Squeeze water out of bread and mix with all ingredients Press into bowl and cover with oiled paper Bring up to pressure and cook for 25 minutes Take from fire and allow pressure to come down

Walnut Potato Roast

One cup ground raw potato; 1 cup dry bread crumbs, 1 cup walnuts, measured and ground; salt and sage to taste; 1 cup hot tomato juice; 3 tablespoonfuls shortening; 3 eggs; 1 teaspoonful Marmite

Melt Marmite and shortening in tomato juice Mix all ingredients together and steam in two covered tins for two hours May also be cooked in pressure cooker Serve with tomato or brown gravy

Homemade Nutmeat (Dark)

One and a half pounds gluten; 1 lb. peanut butter; 1 tablespoonful salt; 1 cup tomato juice

Mix gluten and peanut butter with hands until thoroughly blended. Add salt and tomato juice. Steam in covered tins 3 hours If pressure cooker is used, cook at 15 pounds pressure 1 1/2 hours

Variation The same recipe makes vegetarian bologna if red cake colouring and liquid smoke are used

Our regular readers will recall that some time ago we published a notice in this section, stating that we would be happy to receive recipes from our readers. We are happy that a number of folks have sent us a few recipes and we have been happy to make use of them.

Beginning in this issue, we will publish some recipes that have been perfected by a group of ladies in Pakistan The recipes have all been tested and tasted and found good! We wish to thank our friends in Lahore, Karachi, Peshawar, Rawalpindi and elsewhere in Pakistan for their kindness in letting us use these recipes which they have developed through the years, and we trust that our readers in other parts of Southern Asia will find these recipes helpful. In this issue recipes deal mainly with meat substitutes.—L. J. L.

Oatmeal Patties

Two eggs; 1 cup rolled oats, 1 cup walnuts, ground or chopped; 1/4 cup milk or cream, 1 medium onion, minced; salt and sage to taste; vegex gravy.

Beat eggs and combine all other ingredients with them Drop from spoon to form small patties and brown on both sides in hot shortening Cover with vegex gravy Simmer 45 minutes or 1 hour on top of stove or in oven

Variation One cup thickly cooked "deliya" may be used in place of the oatmeal

Lentil Patties

One cup cooked red dal; 1/2 cup chopped walnuts; 2 eggs (if desired); 1/4 cup whole-wheat flour; onion, salt and sage to taste.

Add whole wheat flour to cooked dal when it is cool and stir well Add remaining ingredients and mix thoroughly Shape into patties, roll in basin and brown in hot vegetable oil

Carrot Patties

One cup walnuts, ground fine, 1 cup grated carrots (mashed or cooked ones may be used), salt and seasoning to taste; 2 cups bread crumbs; 1 medium onion, grated; 2 eggs, beaten; 1/2 cup milk, if necessary.

Mix all ingredients and shape into patties Put into oiled baking pan and cover with sauce made of 2 cups tomato juice, 2 tablespoonfuls minced parsley, and 2 tablespoonfuls corn starch, cooked until clear Add chopped olives if you have them Bake about 45 minutes Also good baked in brown marmite gravy

Egg Croquettes

Four tablespoonfuls flour, 1 tablespoonful butter; 4 hard-boiled eggs; 1 cup milk; 1 teaspoonful salt.

Melt butter, add flour and salt, then milk Stir until smooth Cool and add 4 hard-boiled chopped eggs Roll in beaten egg, then in bread crumbs and fry

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"Grains, fruits, nuts, and vegetables constitute the diet chosen for us by our Creator In them are to be found all the food elements that we need

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CATARRH AND COLDS. Ques. —"I have catarrh of the stomach and am susceptible to colds which come on almost every month Usually after meals a lot of mucus starts coming up and is being expectorated I am inclined to be constipated and have a sluggish liver and when I have attacks of cold I lose my appetite I do not take flesh of any kind and as much as possible avoid sweets, starch, and fatty foods I also avoid cold drinks and fried and spicy foods Kindly prescribe treatment and diet"

Ans Without examining you it is difficult to know exactly the nature of your complaint Frequent colds suggest allergy The allergy can be controlled by anti-histaminic preparation but this should be administered only under the control of a well qualified physician Constipation should be taken care of by a regular and proper regimen of healthful living Exercise daily in the open air and sunshine Drink an abundance of fresh water but not with meals Eat nothing between meals Discontinue the use of soft drinks Do not eat late in the evening, and make the evening meal the lightest of the day consisting mostly of fruit Fast for a day Do not take into the stomach fluids or foods excessively hot or cold Alternate hot or cold to the upper abdomen would be of value but this hydrotherapy measure should be administered under one well qualified to do it properly

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HYDROCEPHALUS Ques—"My wife recently gave birth to a male child whose legs were lifeless in a sort of paralytic condition The feet were half folded lengthwise The head was very big and is hard as a grown up head, fully covered with hair and looked like that of a year-old child's head The body was elongated more than that of an ordinary child It did not survive but died immediately at birth The doctor says that it is due to the fact the mother took too much of Calcium before her fifth month of pregnancy The calcium was administered to her on the prescription and advice of an English lady medical practitioner The mother is all right now"

THE DOCTOR SAYS

1 This question and answer service is free only to regular subscribers

2 No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases

3 All questions must be addressed to The Doctor Says Correspondence personally with the doctor is not available through this service

4 Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES Answers cannot be expected under ONE MONTH

5 Questions sent in on Post Cards will not receive attention

6 Make questions short and to the point Type them or write them very clearly

7 Questions and answers will be published only if they are of such a nature as to be of general interest and without objection but no names will be published Address The Doctor Says Oriental Watchman and Herald of Health P O Box 35 Poona 1

Ans Your unfortunate child which died shortly after delivery and was malformed is certainly not the result of the mother taking Calcium before the fifth month of pregnancy In the world's leading ante natal clinics mothers to be are given extra Calcium from the time pregnancy is confirmed Calcium is necessary for the use of the fetus in developing bones and other tissues The exact cause of the apparent Hydrocephalas and other abnormalities is not clearly understood Sometimes these unfortunate babies survive for a time It is just as well that yours passed away at delivery I sympathize with you in your sorrow and trust that the next child will be a strong and healthy one Such a disaster is seldom repeated in the same family

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DEBILITY Ques—"My boy is seventeen years old He has giddiness, faints occasionally and also has been telling us that there is some sort of numbness all over his body all the time He is losing his appetite and has headache every now and then What could we do to help him

Ans—Your boy should have a thorough examination by a well qualified physician Without examining him personally I am not in a position to diagnose his ailment or to prescribe proper treatment I would suggest however, that he be given a nourishing diet including a seer of milk daily, dahl and an abundance of green, leafy vegetables, fruits and unpolished rice The diet could be supplemented by taking two Yeast tablets three times a day and 10 mg of Thiamin three times a day and 100 micrograms of Vitamin B by Intramuscular injection twice a week

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HUMAN BITE Ques—"At one time a little boy bit my finger and it bled but without my resorting to any sort of treatment healed itself The other day another little girl bit one finger and it did not heal till now despite my resorting to treatment this time I wonder why this should be so Is such a wound dangerous? Is it true that people thus bitten by someone die at the end of six years? Would it be necessary for me to have the child taken to a proper dentist and her teeth examined?

Ans—A human bite can be serious as the human mouth contains different types of harmful bacteria You probably should be having some Procaine Penicillin injections once a day for several days and should keep a moist Magnesium Sulfate compress on the wound People bitten by humans do not die at the end of six years because of the bite It is not necessary to take the child to a dentist to have her teeth examined

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ABORTION Ques—"My wife is 35 and we have girls at the age of seven and eight in our home and a boy of three years Lately she is having abortions for some reason we do not know She has lost much blood and is terribly weak Neither injections nor patent medicines have helped her Kindly let me have your advice at an early date?"

Ans—I would suggest that your wife's blood be examined She should have a Kahn test If the Kahn test is negative, there is a possibility that some difference in one of the type factors in the blood may be responsible or there may be a hormonal imbalance A well qualified obstetrician could administer the hormones in such a way as might prevent repeated abortions I would advise that you consult an obstetrician if one is anywhere available near where you live

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DIM VISION Ques—"I am forty one I cannot read at night I have dim vision Would it be necessary for

me to go to an ophthalmic physician and then wear glasses Some say that after some years I would be able to read at night but if I get used to spectacles now I can never do without them Is this a sound suggestion?

Ans —Without testing your eyes, I am not in a position to know what type of partial blindness you have A lack of Vitamin A in the diet is the cause of night blindness A Vitamin A capsule three times a day, or eating mangoes which are very rich in Vitamin A, or carrots or other brightly coloured yellow fruits and grains would be helpful I would advise that you go to a well-qualified opthalmologist (eye doctor), and be fitted for glasses, if indicated Glasses if properly fitted will not damage the eyes You may have to have the lenses corrected in time when the eyes change due to advancing age

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NERVOUSNESS Ques —"For the last few months I have giddiness, fainting and headaches There is some pain in the left chest Besides, I am suffering from gas trouble, indigestion and constipation If I hear bad news I feel the blood go pounding into my body Chest examinations including X ray cardio graph, Barium tests have been made Doctors say it is only my nerves and that examinations do not reveal real trouble I was advised Bellergal tablets When I hear bad news or learn about the loss of a friend or relative I do not sleep for two days Would Asanas and exercise help me? There has been no loss in my weight but I feel weaker than ever"

Ans —All the troubles of which you speak could be very well due to nervousness The nervous system and the mind control all the organs of the body and if the mind is upset the other organs suffer also The fact that you have had a number of tests which show nothing wrong confirms the diagnosis the doctors made

Some people are naturally nervous, by temperament, and are easily upset by bad news or troubles of any kind Such people must shield themselves as much as possible from things that upset them They should however, not cut themselves off from associations, but should cultivate a spirit of cheerfulness, and should engage in good works, helping those less fortunate than themselves Almost invariably as such a person as yourself takes a strong interest in helping others, he forgets his own troubles and finds great joy in living When one is happy, the complaints of which you speak will go away

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HEIGHT INCREASE Ques — I am twenty My height is 5′ 1″ My father's is 5′ 4″ and my mother's only 5′ What should I do to increase in height?"

Ans —At your age it is too late to think about increasing your height Growth usually ceases at 17 years You can get shoes with built up soles and heels, which might add an inch or more You should choose the kind of clothes that will give an impression of greater height White clothes and clothing that have vertical stripes have this effect to a degree

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YOUR CHILD'S I Q

(Continued from p 19)

five talents went and traded with the same, and made them other five talents And likewise he that had received two, he also gained other two But he that had received one went and digged in the earth, and hid his lord's money

"After a long time the lord of those servants cometh, and reckoneth with them And so he that had received five talents came and brought other five talents, saying, Lord, thou deliveredst unto me five talents behold, I have gained beside them five talents more His lord said unto him, Well done thou good and faithful servant thou hast been faithful over a few things, I will make thee ruler over many things enter thou into the joy of thy lord

"He also that had received two talents came and said, Lord, thou deliveredst unto me two talents behold, I have gained two other talents beside them His lord said unto him, Well done, good and faithful servant, thou hast been faithful over a few things, I will make thee ruler over many things enter thou into the joy of thy lord

"Then he which had received the one talent came and said, Lord, I knew thee that thou art an hard man, reaping where thou hast not sown, and gathering where thou hast not strawed and I was afraid, and went and hid thy talent in the earth lo, there thou hast that is thine

"His lord answered and said unto him, Thou wicked and slothful servant, thou knewest that I reap where I sowed not, and gather where I have not strawed thou oughtest therefore to have put my money to the exchangers, and then at my coming I should have received mine own with usury Take therefore the talent from him, and give it unto him which hath ten talents For unto every one that hath shall be given, and he shall have abundance but from him that hath not shall be taken away even that which he hath And cast ye the unprofitable servant into outer darkness there shall be weeping and gnashing of teeth"

It should be observed that each of the three servants mentioned in the parable received a different number of talents In the day of reckoning they were not judged on how many talents they had received but on the use each had made of his talents

So it is in the matter of intellectual ability Some persons have high I Q's, some have average I Q's, and some have relatively low I Q's One's actual success in life does not depend so much on the amount of intellect he has as it does on the use he makes of it By taking full advantage of his opportunities, a person of average intelligence can make a much greater contribution to life than the person with superior intelligence who takes his life's responsibilities lightly

Even though intelligence tests have been carefully developed and scientifically planned and have proved their worth in a high percentage of persons tested, there are occasional instances where a

person's actual intellectual capacity proved to be greater than indicated by his I Q. Contrariwise, there are occasional instances where a person's actual intellectual capacity proved to be smaller than indicated by his I Q Perhaps he made a miserable failure in study or in practical living Always allow a person to prove his personal assets in everyday living rather than draw hasty conclusions based on the results of a single intelligence test

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SAND IN YOUR GEARS

(Continued from p 11)

Its early symptoms are usually impaired circulation in the foot and leg- coldness, tingling, pain when walking and have redness and blueness of the skin, with pain even while resting Finally, gangrene sets in

No race is exempt Many factors in the production of this disease have been studied, but only one appears to be universal tobacco Abstainers from tobacco are rarely affected Now that smoking has become so widespread among women, it is beginning to appear in them

Smoking has such a great influence on the circulation that the temperature of the finger tips of seasoned smokers will drop from four to twelve degrees centigrade during the smoking of one or two cigarettes Under the microscope it can be seen that the circulation is being slowed by a narrowing of the smaller blood vessels This effect persists for a considerable period after smoking Experimental evidence shows that this effect on blood vessels is due to a stimulation of adrenal-gland secretion by nerves of the sympathetic nervous system affected by nicotine

You get a sick feeling when you think of anything affecting your circulation as much as tobacco can As a child you probably learned what stoppage of circulation does when you tied a string around your finger to watch it grow red and puffy When you saw it growing darker and turning almost black, you took off the string in a hurry--without being told to do so

It can be assumed that a substance which would slow the circulation in the vessels of the arms, legs, fingers and toes would do likewise in the vital organs—in the heart muscle, for example Unfortunately, the living heart cannot be examined with the microscope But certain symptoms indicate that "tobacco heart" is more than a theory

It is characteristic of active muscle that pain appears when there is not enough circulation to remove the products of activity Angina pectoris is a heart condition in which there is much heart pain, often intense Many patients have been relieved of the pain partly or entirely by simply giving up tobacco When circulation to any tissue is sufficiently impaired, there is a breakdown of that tissue The breaking down of heart muscle is constantly increasing in our population Cigarette smoking is likewise increasing Is it being unfair to our great tobacco industry to say that there may be a definite relationship between larger death rates from degenerative heart disease and the wider use of cigarettes? The pouring of large quantities of nicotine into human bodies is not conducive to the abundant health and long life they are capable of, despite the glowing faces in advertisements of the tobacco interests

Nicotine is one of the deadliest poisons known One drop placed on a cat's tongue caused it to leap into the air, roll over in convulsions and die in forty seconds Sixty milligrams (one grain) is fatal to a man. About two milligrams of nicotine is absorbed from each cigarette

Nicotine has a peculiar affinity for certain elements of nerve tissue and thus it produces its powerful effects The mental confusion giddiness and nausea that many feel before they become accustomed to tobacco are due to the effect of the nicotine on their highly sensitive and delicate nerve structures

"But tobacco is soothing to my nerves" We have all heard that one Did you ever observe a smoker deprived for a longer period than usual of his accustomed smoke? He grows restless and irritable, his muscles twitch, his face looks distressed and his mind becomes confused

The intensity of the symptoms varies with the strength of the tobacco habit and the nervous make-up of the man The suffering of some men is intense One man who had smoked for many years and was attempting to stop told how on one occasion he had to withdraw into a remote corner of the New York post office where he could weep unobserved, because of his intense longing for tobacco

A cigarette brings quick though temporary relief from such suffering The smoker inhales deeply a look of peace and satisfaction comes over his face, his restlessness departs and calmness supplants the former nervousness Yes tobacco soothes the nerves—of the addict suffering from withdrawal symptoms Morphine will do the same for the opium addict who has been too long without his shot Both the smoker and the opium user are drug addicts in the truest sense of the word

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MAY DAY BLACKOUT!

JOHN R LEWIS

ONE hundred and seventy five years ago, the month of May arrived, and around the gay beribboned maypole on the green, our great grandparents prepared to dance and jig Well they might! Was there not a freshly spread carpet of living green on the bare earth? Buds were bursting into scented blossom on the boughs, flowers opened in the warm sunshine birds sang merrily lambs gambolled in the meadows All nature heralded a great change

Now it is a matter of record that on May 19th of that year, there occurred a phenomenon associated with that spring sun which set multitudes of hearts beating faster with apprehension or expectancy!

A "HORROR OF DARKNESS"

The events of May 19, 1780, deserve the most careful consideration From letters, astronomical textbooks, and newspapers we learn that the day began quite normally with the rising of the sun, and then suddenly, over a great area of the earth's surface darkness enveloped town and country like a pall A sudden chill filled the atmosphere as men and women out of doors sought to find their way around in darkness like that as when Israel left the land of Egypt The singing of the birds stopped, fowls returned to roost, men returned from labour in the fields and schools were dismissed as the children fled homeward Because horses could not be driven or ridden with safety in the blackness, travellers stopped at the nearest farm house as fear, anxiety and awe filled the minds of the people

At noon all work had come to a standstill, and the darkness persisted People felt their way to the chapels with lanterns, and while the darkness was so great that white paper could not be seen when held within six inches of the eyes, the preachers held candles and read from the Book of God Men, ordinarily cool, were filled with alarm, the wicked hurried to their neighbours to confess wrongs and ask forgiveness, the superstitious dropped to their knees asking God to spare them

Without respite the horror con

On May 19, 1780, a little after sun rise, darkness covered a great area of the earth and by noon all work was at a standstill God was giving the world a sign to show the beginning of the last days.

tinued, and no one knew from nature when day ended and night began. It was all night. But later, when the full moon rose it appeared as though dipped in blood, all night its dull red circle travelled its orbit, until the next morning when the sun was seen again

The poet describes the day

"'Twas on a May day of the far old year
Seventeen hundred and eighty, that there fell
Over the bloom and the sweet life of the spring,
Over the fresh earth, and the heaven at noon,
A horror of great darkness, like the night
Of which the Norland sagas tell—
The twilight of the gods
The cattle at the pasture bars
Lowed, and looked homeward, bats on leather wings
Fluttered abroad, the sounds of labour died,
Men prayed, and women wept, all ears grew sharp
To hear the doom blast of the trumpet shatter
The black sky

In assessing the nature of this "Dark Day" of 1780, two facts should be kept in mind First, the darkness was not due to an eclipse, second, "the true cause of this remarkable phenomenon is *not* known," according to *Webster's International Dictionary*

As related, the darkening of the sun caught people as unprepared as when the city's power supply fails and all the lights go off. But there were some Christian people to whom the day was no surprise; nay more, these individuals greeted the day's passing with great joy and tears of emotion The fervent preaching of the Wesleys had aroused in men everywhere the need to study not only the Word of God, but also the prophetic Scriptures about the Lord's return, so that there were many believers who had sung with Wesley "Lo, He comes with clouds descending," and who were looking for evidence of the Saviour's advent At the back of their minds were the words of Jesus "Immediately after the tribulation of those days shall the sun be darkened" Matt 24 29

In November, 1833, God gave another sign in the form of a marvellous celestial display—shower upon shower of shooting stars made night as light as day.

Signs in Earth and Heaven

Equally well remembered were the words of the apostle John Lo there was a great earthquake, and the sun became black as sackcloth of hair, and the moon became as blood and the stars of heaven fell unto the earth and the heaven departed as a scroll for the great day of His wrath is come' Rev 6 12 17

The men and women of 1780 who were over fifty years of age, remembered very clearly the month of November, 1755 An earthquake central at Lisbon, had killed 90,000 inhabitants in ten seconds, and had convulsed four million square miles of the surface of the earth Loch Lomond in Scotland and Kinsale Harbour in Ireland were places affected by convulsions reaching Greenland, and Northern Africa—an earthquake stated to be the greatest of modern times

It was natural that men, linking this earthquake with the darkened sun, and the red moon, should see a fulfilment of the apocalyptic forecast, and with the keenest of interest they would watch night after night for the fourth event listed, the falling of the stars from heaven.

Watch they did, and while they watched, churches of all denominations held conventions for the study of Bible prophecy concerning the last days, a great movement spread over the earth, gathering momentum

everywhere as believers embraced the advent hope

Then it happened. Just after sunset in November, 1833, there commenced a celestial display such as the world had never seen Shower upon shower of shooting stars made the night as light as day Those who had gone to bed rose to see why the night was so bright All went out of doors to see the celestial fireworks, and few returned to bed that night, for until the dawn the display continued Like flakes in a thick snowstorm the stars fell, wrote an observer, and it is estimated that by the time the light of dawn dimmed the shower of light, over two million meteors had flashed across the sky, 200,000 every hour! Dr Talmage wrote in the *Christian Herald* "It grew lighter than at noonday, arrows of fire, balls of fire, trails of fire, showers of fire, some in appearance were larger than a full moon All the luminaries of the skies seemed to have received marching orders The heavens were ribbed and interlaced and garlanded with meteoric display From horizon to horizon everything was in combustion and conflagration Many a brain gave way that night It was an awful strain on the strongest nerves Millions of people fell on their knees in prayer East, west, north and south, it looked as if the heavens were in maniac disorder"

That this was a sign that Christ was coming soon, no one doubted Judgment was near The kingdom of God was coming An unbelievable impetus was given to evangelism, and the advent chorus swelled and swelled Powerful convictions drove missionaries to the remotest part of the earth that the Gospel might be preached to all nations before the end should come

Today, while mankind lives under the threat of the hydrogen bomb, the believer recalls again the words of the apostle Peter "We have not followed cunningly devised fables, when we made known unto you the power and coming of our Lord Jesus Christ" "We have also a more sure word of prophecy, whereunto ye do well that ye take heed, as unto a light that shineth in a dark place" 2 Peter 1 16, 19

Happy is the man who understands the evidence as saying, 'Behold, I come quickly," and can respond whole-heartedly, "Even so come, Lord Jesus"

BEYOND the SUNSET

Mrs M E Brookes

"I AM afraid the walk has been *too much for you*," said the sailor

"No, my son, I have been filled with joy that just once more before I am laid to rest I have had the pleasure of standing by your father's grave to watch the sunset"

The waves rippled and danced in the rays of the setting sun Down behind the distant hills of the little Cornish fishing village it sank Walking slowly up one of the steep paths was an aged lady, leaning on the arm of her stalwart sailor son It was a hard walk for the mother, and every now and then they stopped for a short rest.

They finished the slow journey homeward, and the mother went to rest When morning dawned, she was found sleeping her last sleep, on her face a look of almost youthful wonder, as though she had seen some bright vision ere she closed her eyes in sleep

But the sunset of life comes not only to the aged Many are the young and strong who are called to rest from their labours Happy is the life which is always ready for the call

Jasper and Enid were very happily married They lived in a pretty villa, with red and white roses growing around the porch They had four lovely children One morning, while going to his work as usual, a sudden impulse came to Jasper Returning to his house, he clasped his wife's hands, and looking earnestly into her eyes said, "Goodbye, Enid" Neither of them knew that it was to be their last goodbye A motor accident—and before that day's sunset, Jasper was lying in his last sleep

Two young men were cutting down a tree in a wood The Spirit of God had been striving with one of them for many weeks He had said many times, I will surrender my life, but not today Suddenly at one stroke of the axe the tree fell on the opposite man who was killed on the spot Might that not have been I, said the other man And he gratefully gave his heart to the Lord

A Little Child Shall Lead Them

At a big city evangelistic meeting a woman came night after night Fastening her eyes on the preacher she seemed to drink in every word When a lady visitor called on her she said, "I am the only member of a large family who has ever inquired into spiritual things"

The visitor asked her who had led her to seek spiritual things, and she told of the loss of a little girl only four years old "Little Rosie," she said, "had gone off so proudly to a children's service with a new umbrella I had bought her She came home that afternoon all flushed and feverish I put her to bed, and in two days the little life had sped"

The broken hearted mother had put the little umbrella in a travelling case and gone to stay with a sister who had a little girl the same age as Rosie One day, when it was raining, Rosie's mother brought the umbrella to give to her niece When she opened it, a text card that had been given to the child fluttered to her feet Picking it up, the mother read the words, "I will go before you" These words set that mother searching with all her heart to find out if she would really meet her little girl again

What a wonderful balm for all bereaved to know the Bible certainties of a home beyond the sunset

The Dream Home

During the blitz in London, I met a woman evacuee in a train She soon got into conversation, for her heart seemed to be bursting with grief "We have lost our all," she said "We had only just finished

fixing up the home we had dreamed of for years Then one night while in the shelter, we heard the fatal blow fall on our house, and every thing was gone' Then she added, 'It was only the Anderson shelter that saved our lives"

"No, my friend," I said, "it was not the shelter that saved your lives, it was the mercy of God Someone was praying for your safety"

"Yes," she said, 'you are right We prayed as we had never prayed before for our lives to be spared, and they were'

Should we not learn from the thousands of homes that were blitzed during that war, how transitory are our earthly possessions? Is it worth while to put our every interest into homes that may disappear in a moment of time? Every mind that loves beauty has an ideal of a perfect home but how few ever realize that perfection here What a comfort there is in the words of Jeremiah 29 11 I know the plans that I have for you says the Lord, plans for welfare and not for evil, to give you a future and a hope" R S V

YOU AND THE BOOK

SPIRITISM—ANCIENT AND MODERN

1 Leviticus 19 31—Spiritism is not a new phenomenon already thirty five hundred years ago God's people were warned against it

Regard not them that have familiar spirits, neither seek after wizards, to be defiled by them I am the Lord your God'

2 Leviticus 20 27 In the days of Moses those who participated in it were commanded to be put to death

A man also or a woman that hath a familiar spirit, or that is a wizard shall surely be put to death they shall stone them with stones their blood shall be upon them'

3 Isaiah 2 6 The true worship of God and spiritism are absolutely incompatible

'Therefore Thou hast forsaken Thy people the house of Jacob, because they be replenished from the east and are soothsayers like the Philistines and they please themselves in the children of strangers

4 1 Samuel 28 7, 31 4—Dabbling with spiritism has at times led to suicide

'Then said Saul unto his servants Seek me a woman that hath a familiar spirit that I may go to her and inquire of her And his servants said to him Behold there is a woman that hath a familiar spirit at Endor' Then Saul took a sword and fell upon it'

5 Revelation 16 14—Spiritism also precipitates wars

For they are the spirits of devils, working miracles, which go forth unto the kings of the earth and of the whole world, to gather them to the battle of that great day of God Almighty'

6 1 Timothy 4 1 Ancient spiritualism is to have a marked revival in the last days of earth's history

Now the Spirit speaketh expressly, that in the latter times some shall depart from the faith, giving heed to seducing spirits and doctrines of devils'

7 Psalm 146 4, Ecclesiastes 9 5, 6 10 Since the dead are unconscious, and consequently unable to communicate with the living spiritism must be a deception

His breath goeth forth, he returneth to his earth, in that very day his thoughts perish'

For the living know that they shall die but the dead know not anything Also their love and their hatred and their envy, is now perished, there is no work nor device nor knowledge, nor wisdom in the grave

8 2 Corinthians 11 14, 15—The phenomena of spiritualistic seances are more than just tricks, the devil and his evil angels impersonate the dead

'And no marvel, for Satan himself is transformed into an angel of light Therefore it is no great thing if his ministers also be transformed as the ministers of righteousness, whose end shall be according to their works"

9 Revelation 12 12, 13 13—As the end approaches, the efforts of Satan through various kinds of spiritualistic agencies will increase

"Woe to the inhabiters of the earth and of the sea! for the devil is come down unto you, having great wrath, because he knoweth that he hath but a short time'

"And he doeth great wonders, so that he maketh fire come down from heaven on the earth in the sight of men"

10 John 8 44—At times Satan and his angels may answer truthfully at seances, but when it serves their purpose, they will resort to lies

"The devil abode not in the truth, because there is no truth in him When he speaketh a lie he speaketh of his own for he is a liar and the father of it"

11 1 John 4 1 3—The Christian is admonished to "try the spirits"

'Beloved, believe not every spirit but try the spirits whether they are of God Hereby know ye the Spirit of God Every spirit that confesseth that Jesus Christ is come in the flesh is of God and every spirit that confesseth not that Jesus Christ is come in the flesh is not of God and this is that spirit of antichrist"

12 Deuteronomy 13 1 3—Miracles do not constitute a proof of divine approval

'If there arise among you a prophet, or a dreamer of dreams and giveth thee a sign or a wonder, and the sign or the wonder come to pass, whereof he spake unto thee, saying, Let us go after other gods, which thou hast not known, and let us serve them thou shalt not hearken unto the words of that prophet or that dreamer of dreams for the Lord your God proveth you, to know whether ye love the Lord your God with all your heart and with all you soul"

13 Isaiah 8 19, 20—Not from the dark seance chamber but from the Scripture of truth the Christian is to learn God's will for his life

"And when they shall say unto you, Seek unto them that have familiar spirits, and unto wizards that peep, and that mutter should not a people seek unto their God' for the living to the dead? To the law and to the testimony if they speak not according to this word it is because there is no light in them"

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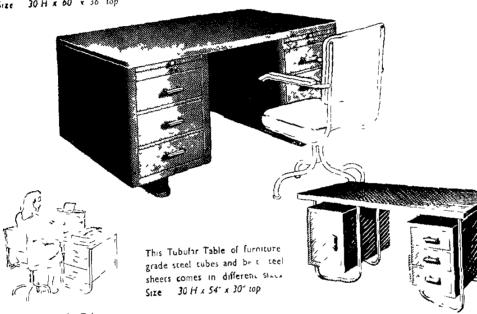
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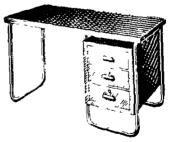
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Photo U S I S

ELECTRONIC DEVIC[illegible] TRANSLATES PASSA[illegible] FROM RUSSIAN TO ENG[illegible]SH

A mechanical trans[illegible] machine that automat[illegible] translates one language [illegible] another has been develop[illegible] in the United States by [illegible] International Business Mac[illegible] Corporation The machine has a "vocabulary" of 250 Rus[illegible] words and can be adapted to other languages The operator types Russian phrases which appear as holes in the cards shown in the machine The holes activate electrical impulses, which set the machine in motion and cause it to translate from Russian into English

Photo U S I S

PUBLIC HEALTH SERVICE MARKS [illegible] ANNIVERSARY IN U S

Mobile units like this carry on nation-wide campaigns of prevention against tuberculosis and other diseases, through free X ray examinations

The Oriental Watchman and Herald of

Health

A Magazine for Home and Happiness

-the-Minute Articles

of Interest For

*   *

Fathers

*   *

Mothers

*   *

Boys and Girls

*   *

Students

*   *

Everybody

September 1955

The Oriental Watchman and Herald of

HEALTH

46th YEAR OF PUBLICATION

Contents

September 1955

L J LARSON, M A, B Sc, Editor

DUNBAR SMITH, M D, D N B, D T M & H (LOND)
Associate Editor

J B OLIVER, M D, D T M
Associate Editor

OUR COVER

"About the only thing we have left that actually discriminates in favour o' the plain people is the stork."—Kin Hubbard, "Sayings"

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Minute Meditations

THE UNKNOWN QUANTITY

D. A. Delafield

ROBERT moaned over his algebra paper. "Dad," he said, "the teacher told me that X equals Y minus 5, but I don't know how he ever figured it out."

I sympathized with the look of anguish on my son's face. He was echoing the same doleful complaint I had expressed when I took algebra in high school twenty-five years ago. It was also hard for me to figure out how the X got to be Y minus 5, or anything else.

But Bob is doing better than I did. I believe he will get through first-year algebra in one year. It took me two. Those two years I spent on algebra taught me some hard lessons, but I have profited from them.

We have all seen people who virtually "eat up" their "maths." Some of them become science teachers and astronomers. The rest of us find more humble work, suited to our talents.

No, I never could quite understand algebra, but algebra helped me to understand life a little better. I learned that things you don't understand may be just as useful as things you do. I also learned that it is possible sometimes to know things even though you cannot understand them.

One thing I learned about algebra was that X never equals 0. It always has some value. That's true about the unknown quantity in life, too. Things we do not understand appear to be against us, but truly they are for us We climb the heights over the deep, mysterious things.

Long delays annoy us, they seem so useless. But delay gives us a chance to adjust ourselves to life, and the orientation period

(Continued on p 5)

The Editor Says

ADDA Jurcke produced 834 children, grandchildren and great-grandchildren Of these 106 were born illegitimately, 142 were beggars, 64 were inmates of institutions supported by the public in which paupers were cared for, 181 of the females became prostitutes, 79 were sentenced for various crimes including 7 murders This is the record of the results of one woman's use of alcoholic drinks

It is of interest to note that the hereditary effects due to alcoholism are transmitted mainly by the mother Certainly, the male is affected by alcohol, and the alcoholic father makes his unfortunate contribution to the total of the heritage which will so largely affect the child But it must never be forgotten that the unborn child in its alcoholic mother's womb already bears the ineffasable stamp of degeneracy It frequently happens that the fœtus is not strong enough to last to the end and abortion occurs Among such children who do come into the world, infant mortality is extremely high Often this mortality is due to courses connected with nursing because the milk of an alcoholic mother is itself poisoned

Those who are accustomed to deal with infants and young children readily recognize which child has drunken parents Squinting, general debility, an appearance of age and malformations of the skull are all eloquent signs When a child is conceived by its parents when they are in a state of inebriation, its body may be so malformed as to be regarded as a monster Certain authors contend that if there are in one and the same family normal children and abnormal children, it is safe to assume that the latter were conceived while the parents were under the influence of alcohol As temporary drunkenness is sufficient to produce defective children, it is not necessary that the parents be habitual drinkers or confirmed alcoholics in order to produce defective offsprings A few of the anomalies and diseases which may affect the drunkard's descendants are hydrocephaly (water on the brain) as infants, and nervous disorders, possibly even epilepsy, later, considerable mental debility and an inability to support alcohol plus an irresistible desire for it

According to a theory developed by Erasmus Darwin, the father of Charles Darwin, hereditary defects arising from alcoholism are transmitted to children of the 4th generation, unless, of course, intervening generations rigidly abstain from the use of alcohol

More recently professor Morel has established the following table of alcoholic heredity.

First generation—Immorality, excesses, depravity and brutality

Second generation—Hereditary drunkenness, fits, manias, general paralysis.

Third generation—Sobriety, tendency to hypochondria, persecution mania, homicidal tendency

Fourth generation—Under developed intelligence, stupidity, transition to idiocy and finally, probably extinction of the line

It is generally known that alcoholism leads to degeneracy of the race The children of drunkards are often stunted, with badly developed chests and a predisposition to tuberculosis.

Is it not strange that with scarcely a thought or care, modern men and women, enlightened as they are, indulge intemperance by surfeiting and drunkenness and thereby leave as their legacy to the next generation, disease, enfeebled intellects, and polluted morals

How important it is that every young man and every young woman should know these things and that every parent should realize their responsibility It has been truly written in the books of Moses, "Their wine is the poison of dragons, and the cruel venom of asps"

Better leave it alone!

WOMEN LIVE LONGER

THE fact that women live longer than men is well known, but the reasons for longer life on the distaff side were answered in the *Journal of the American Medical Association*

The reasons listed by an authority were these

1 Males are less resistant to disease than females, from birth onward

2 The death rate from adverse conditions is higher for males than for females

3. More males are born dead than females Interestingly enough, this is also true among animals

4 Not only is the death rate higher among males at birth but also during the first day of life and each year thereafter, by about the same percentage

5. Nearly all fatal maladies kill more men than women Exceptions are cancer, diabetes, exophthalmic goitre, and gallstones

6 Men die of violent causes more often than women This includes murder, industrial accident, alcoholism, and suicide

7 Men are exposed to more hazards in their work, including accident, violence, and infection

8 The death rate from childbirth has been reduced drastically in the past fifteen years

9 Lung cancer has increased far more among men than among women

10 Heart disease takes many more men than women

11 Home equipment and safety improvements, plus streamlined medical and surgical treatment, have cut down serious accidents in the home

So there are eleven reasons why you should teach your wife to be a widow, for the odds are stacked against us men, and our wives are sure to outlive us!

The Unknown Quantity

(Continued from p 3)

teaches us patience. Sickness depresses and weakens us, but we learn sympathy and brotherhood on the bed of suffering. I know people who think their in-laws are against them. But here we have one of our best opportunities to learn large-heartedness and tolerance.

I have a friend, an eminently successful teacher, whose back was twisted out of shape by a childhood disease. I had known him for several years, but he walked so straight that I had never observed his difficulty. One day I told him that I admired his erect stance "You stand like a soldier," I said, "straight as an arrow."

With an earnest look he said, "Feel my back."

I pressed a hand against the vertebræ The bones of the back were curved like a large question mark

"Haven't you ever noticed it?" he asked me.

"No," I replied. "You stood so tall I couldn't see anything else."

X certainly didn't equal 0 to his noble spirit. The unknown quantity in his life taught him true values He bore himself like the great man and highly successful teacher he was.

Try to find the answer. But if you cannot, breathe this prayer. "Open my eyes, Lord, that I may see" Then wait. In time the wonderful Numberer will teach you that X always equals something of real value.

WHAT'S IN THE NEWS?

The human heart produces enough energy during a lifetime to lift the battleship "Missouri" 14 feet out of the water

* * * *

Queen Bees are considered super sensitive to temperature changes in the larva stage, and are so weak they will die if left only a part of an hour without food at this time But they are hardy creatures when they mature

* * * *

A 500 pound sting ray in the pool of Sydney, Australia's Taronga Zoo has become tame enough to eat from the hand of its keeper This 10 foot creature, the largest in captivity, spends most of its day sleeping in the corner of a pool, but glides to the surface when a titbit is held out

* * * *

If you had trouble this year with your tomato plants because of transplanting problems, try this From three to five days before you are ready to transplant them, spray a sugar solution on the young tomato plants It acts much the same as blood plasma does in combating shock in human beings The solution is one and a half cups of sugar to a gallon of water

* * * *

The life of a ten year old Los Angeles girl hung in the balance recently because of the bite of a black widow spider The drama began when little Sharon Ann cried out while she was playing in the garage on her bicycle Her mother, Mrs Cecil Strealey, ran to the garage and saw the crushed body of a black widow spider on the handle bars At the hospital, doctors began immediately to search for a serum that would save the girl's life They learned that such a serum had once been manufactured but had since been discontinued Finally, after a six hour search, doctors found Mrs Martha Moore, who had been bitten by a black widow spider not long before From her blood doctors made a serum that saved Sharon Ann's life

* * * *

Bacteria in suspended animation, which have been found embedded in the mud of the ocean floor, are thought by some scientists to be the world's oldest living things

* * * *

A golfer playing 18 holes probably walks about four miles

* * * *

Japan's only known uranium deposit is in a Feldspar quarry 150 miles northeast of Tokyo A sufficient quantity is found there, according to Prof Kenjiro Kimura, of Tokyo University, to provide for an experimental atomic furnace

* * * *

The appetites of catfish vary with the temperature of the water They are reported to feed heavily at 70 degrees but will not feed at 40

* * * *

The largest fleet of trolley buses in the world is claimed by London, England, with its 1,750 vehicles The system transports 750 million passengers a year

* * * *

It is estimated that it would take 2,000 fireflies, flashing simultaneously, to produce the same room illumination as a single candle

* * * *

Studies conducted by Pasteur in the field of fermentation are still considered by scientists to be among the most important on the subject

Food Hygiene

ROBERT P. LITTLE, M.D.

Food handlers should pass a close physical examination.

DID you know that duck eggs are sometimes a source of food poisoning? that zinc-lined pails should not be used for lemonade? that 1 per cent of cats and dogs are carriers of dangerous salmonella organisms?

Your food can be polluted in many ways Among them is pollution by chemicals Commercial zinc is frequently contaminated with arsenic and antimony, which acid beverages or foods can dissolve This means that zinc-lined pails should never be used to contain sour beverages or as preserving kettles. The glaze on earthenware jars and yellow mixing bowls is frequently a lead glaze This means that such bowls should not be used for tart foods such as apple butter Cheap gray enamelware may contain antimony Cadmium (similar to zinc) is poisonous if used to plate kitchenware.

Sodium fluoride is excellent for killing ants and roaches, but if stored in salt shakers, it may unintentionally be used to season food, as once happened Fortunately no one was hurt, because the amount was small But when sodium fluoride was once mistaken for powdered milk and added to omelettes, numerous deaths resulted

Never store poisons with foods, but keep them in special cabinets How often this rule is broken! Once when inspecting a hotel I observed fly spray, paints, sulphuric acid, lye, roach powder and rat poison in the pantry In the drawer with the flatware were the plumbers' tools, shotgun shells, and fishhooks

Lead paints should never be used on tables where food is cut The food inspector frequently sees kitchen tables scored with knife cuts and almost denuded of paint You eat that paint

Poisonous insecticides are sometimes used on fruits and vegetables Always wash fruits and vegetables before eating them Once after a spraying operation poisonous insecticide lodged on a farmhouse roof The cistern water became contaminated from the insecticide, and caused paralysis in a woman of the household Cistern water should *never* be used for drinking

Moreover, hot water from the faucet is convenient, but it is not best to add it to food Hot water is a ready solvent and may dissolve poisonous metals from pipes joints, and storage tanks at times when the water may not have been used freely and thus may not have been kept free of irritating substances

A carful of tourists once were poisoned when they drank the radiator water of their car

Foreign bodies frequently find their way into food, and they may be swallowed, causing injury Old-fashioned can openers may introduce metal shreds, or shreds may become detached from steel wool or metal dish scouring pads. When inspecting a certain restaurant I observed a plate-glass partition that was badly chipped from being

O A Skau

Here is a garbage heap in one of our principle cities. Such conditions must be cleaned up in order to keep away flies which carry so much disease.

struck by dishes. Did these chips fall into the food?

Food poisoning may result from bacteria or their poisons. This kind of food poisoning is far more common than most people realize, for unless a number of people are made seriously ill, the health department is seldom notified It is hard for officials to pin down the cause Most people suffer in silence But who has not been made ill by food?

The commonest causes of food poisoning are not ptomaines—these have been absolved—but bacteria of the salmonella group The source of these germs is animal or human Epidemics of salmonella-caused diarrhœa are frequent among cats, dogs, rats and mice

Cockroaches, according to Dr Theodore A Olsen of the University of Minnesota, may harbour salmonella germs for several days These germs, when deposited on food or dishes, may remain alive for a month or two

Flies are also carriers Cats and dogs frequently have the run of kitchens and grocery stores Salmonella organisms can infect the human gastro-intestinal tract, causing vomiting, cramps, and diarrhœa The victims often attribute such symptoms to change of water or air, ignoring the flies in the kitchen, the cat in the pantry, and the mice, rats or roaches that may run over the food and dishes at night

Duck eggs (but not hen eggs) may carry salmonella germs An epidemic in England from duck eggs was once reported by the *British Medical Journal* If you eat duck eggs, be sure to boil them hard

Spray-dried hen eggs may be contaminated from their shells, although hen eggs are safe when unbroken Furthermore, salmonella germs may contaminate milk, which is another reason for pasteurization

Certain kinds of food are particularly dangerous if not refrigerated Among them are poultry, lobsters, ham, sandwiches and salads It is wise to avoid cold-storage poultry in warm weather Veal is a rather frequent source of food poisoning Mutton and lamb have been incriminated, though less often

Pranlal K Patel

Care should be taken to see that articles of food are kept away from dust and germs Bacterial poisons contaminate food and cause much disease

Bacterial poisons such as those produced by the staphylococcus (a pus germ) may contaminate food This organism grows especially well in beaten fillings Indeed, cream puffs are so notoriously dangerous that health departments commonly forbid their sale in summer

The staphylococcus toxin causes a violent form of food poisoning, with vomiting, cramps and diarrhœa The source of the infection is animal (rats, mice, cockroaches) or human Any food handler with a boil or felon can cause an epidemic among his customers Once the poison has formed, boiling of the food does not destroy it

The type of food poisoning known as botulism is caused by a soluble toxin In the United States the source is usually imperfectly sterilized home-canned non-acid

(Continued on p 12)

How to KEEP FIT

R LOMAX WELLS, M.D, F.A.C.P.

THERE is more to keeping fit than doing your "daily dozen," believe me Keeping fit is a full-time job and a worth-while one too It's a job that pays *you* many dividends What is meant by keeping fit? It is not merely a matter of muscular exercise, it is the process of maintaining good physical health and good mental health and keeping the two in balance

How shall we go about this business of keeping fit? A little thoughtful attention to many things and making them a matter of daily habit will be of great help to you There is no known "sure-fire" guarantee against disease and injury, and there are no cure-alls once you are sick or have been injured Nevertheless, your ability to fight off disease and the effects of injury is greater if you are in good physical condition Your mental attitude toward the situation will be a positive factor in your recovery Keeping fit is how we live our lives How are *you* doing? You can get a good idea by seeing if you are

1. Providing a balanced and protective diet for your family and yourself Avoid dietary fads Do eat a good breakfast and make it as leisurely as possible

2 Being sure you get proper rest and exercise regularly (the amount and balance between the two varies with age)

3. Keeping a good balance between work and play Remember, all work and no play makes Jack a dull boy And—all play and no work can make him even duller!

4 Keeping your weight normal Everybody may love a fat man, but the Grim Reaper loves him most of all Nor can I find *trim figure* defined as "bones covered by skin" in any of my dictionaries or books on how to look and keep beautiful

5 Promoting sound habits of cleanliness

6 Having a family physician and a dentist who know and understand your family and home situation

7 Consulting your physician regularly—

To assist in the normal development of your children

To help maintain health in your productive years

To detect signs of chronic disease

8 Having regular dental check-ups

9 Avoiding self-prescribed drugs, advertised "cures," and cure-alls

10 Avoiding quacks and superstitions.

Let's take a closer look at some of the items in this list Regular visits to your family physician or a specialist in child care for advice on feeding and care and for guidance in physical, emotional, and social growth is a must in a good start for Junior and his brothers and sisters During this time the doctor will advise you about the various immunizing, protective injections—protection against smallpox, typhoid fever, diphtheria, tetanus (lock jaw), and whooping cough (the last three are now given in a single injection) Make baby's first visit to the dentist by the age of three And don't forget to keep a close watch on those new shoes for baby Very young children sometimes need them as often as every four weeks. With loving care and good health, baby is on his way to keeping fit

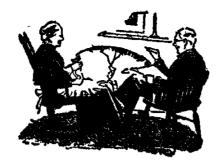
During school years, periodic physical and dental check-ups should be continued And by the way, about half of the absences from school are for colds and other respiratory diseases Immediate attention, proper care, and rest may shorten the illness and lessen the chance of complications Accidents are childhood's greatest hazard Watch for objects that may injure children, such as portable heaters electric fans without guards electrical appliances with frayed cords, pans containing scalding liquids within reach on stoves and tables, unguarded windows and stairways, and loose matches left about Keep cleaning fluids, lye

laundry bleaches, kerosene, insecticides, and other poisons out of children's reach Be sure medicines are labelled properly Keep simple first-aid supplies handy, and learn how and when to use them

Some 4,000,000 children in the United States of America have eye defects Find out whether your child needs glasses or corrective treatment And while you are at the oculist's, better have your eyes checked *too*

Periodic examinations (especially from age 40 on) are important in the early detection of signs of breakdown, the presence of chronic progressive disabling diseases, and in helping to establish patterns of diet, exercise, work, and recreation adjusted to age Today physicians are paying increasing attention to the problems of old age and the science of aging, called geriatrics (pronounced jerry-at-rix) Keeping fit is part of life at all ages

Building good health at home is the key to keeping fit Even though our housing facilities may not offer the last word in space, heating, lighting, ventilation, and air, we can do many things to help us develop and maintain good mental and physical health

I would urge you to build good sound emotional health Love, laughter, family fun, and hobbies are the foundation of individual emotional health and family growth A balanced diet, adequate sleep (seven to eight hours for most adults), moderate exercise in the fresh air, daily baths, and good posture all help build good physical health

Moderate fatigue at the end of a good day's work is normal However, if fatigue is beginning to get you down, take a good look at *your* way of living It's time to relax Keep your work, love, play, and worship in balance if you would have good emotional health

All this adds up to making ourselves health-conscious through good habits by keeping health in its proper perspective and balance, so that we neither neglect nor overdo it Good health is a good way of life—and a good life is made better by good health Life does not begin at forty, and keeping fit is not a problem for any age, it is for all ages Are you willing to accept the challenge offered by better health habits, and keep fit? Your family needs you, your community needs you, your country needs you—keep fit, have fun, and enjoy this good life of yours You'll be glad you did

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CARING FOR THE INVALID

(Continued from p 2)

in place), seat the patient, cross the blanket ends over his knees, and wrap around his legs and feet These comfort details gain importance from the fact that the sick person must remain in the same position for long periods, and may develop bedsores from pressure at uncushioned points where the body weight falls

Never lift a sick person by the armpits In heart, stomach, or respiratory troubles, such lifting can cause great distress If it is a case of slipping down too far in the bed, put one arm behind the person's shoulder and your other arm under the buttocks, and shove gently upward to the desired position

If the patient cannot stand or walk alone, let him take your arm, or put his arm across your shoulder and yours across his back at the waistline When you take a patient's arm or put your hand under his elbow for support, he does not have the sense of security that comes when he grasps your arm or shoulder In selecting a companion for an invalid, choose one of about *the same height when possible*

When a patient finds it difficult to raise his arms, you may cut his shirt on the shoulder line and close it with snap fasteners It will then be a simple matter to slip it down to the waist line, and with the patient's arms at his sides, to carry it over his head For a woman's gown, one shoulder opening may be sufficient if there are no sleeves Simplicity and comfort are fundamental points in selecting clothing, but attractive colour and style can have a beneficial effect on the sick

Plan dainty trays and a varied menu to make each meal a pleasurable anticipation A good plan is to get a little file box and note on cards all foods appropriate and attractive Have divisions for beverages, soups, main dishes, vegetables, salads, and desserts This file is a real time-saver There is no part of home responsibility in which a good system is more rewarding than in the care of the invalid

Above all, maintain a cheerful atmosphere for the patient Be kind without fail Life is hard enough for him at best, and he needs all the moral support you can give him

Make careful plans so that you may give the patient the maximum of help with a minimum of effort

THE PSYCHIATRIST

HARRISON EVANS, M.D.

The help your family physician may ask of a psychiatrist may prevent troubles that would develop without his guidance

THE average person has become accustomed to medical specialization The surgeon, the cardiologist, the ophthalmologist, and the many other specialists are viewed as a necessity by the average layman, and their advice or special talents are utilized freely

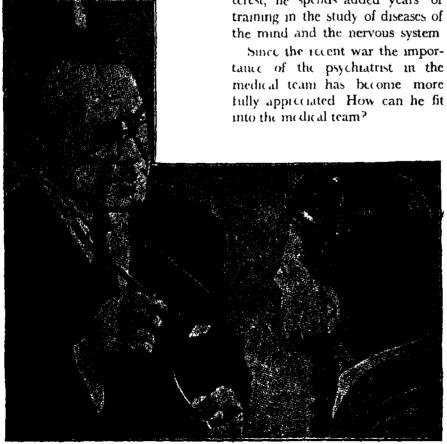
Your doctor may find it necessary to call for the specialised help of the psychiatrist who will be an invaluable help in discovering the root cause of your trouble.

A more recent and less generally accepted participant in this team of medical specialists is the psychiatrist, his training is in the regular medical course and the usual internship, just as the other specialists, but instead of taking postgraduate work in one of the more common fields of special interest, he spends added years of training in the study of diseases of the mind and the nervous system

Since the recent war the importance of the psychiatrist in the medical team has become more fully appreciated How can he fit into the medical team?

One of the major problems in medicine is to establish a correct diagnosis Until this is done, no suitable treatment can be carried out The psychiatrist can be helpful in the diagnostic study of a patient

It is not always clear what the underlying causative factors may be in the production of symptoms In any illness, the doctor has to consider infection, disturbed circulation, tumour, and other specific physical causes He also must consider psychological or emotional factors as being the cause The psychiatrist, because of his special training, is in a position to evaluate the patient's psychological and emotional status in order to help determine whether it is playing a part in his illness Mental stress can cause upsets

Let us consider a patient who is suffering from headache There are numerous causes of headache, such as sinus trouble, eye-strain, high blood pressure, brain tumour, and neuralgia But one of the most common causes is emotional tension A careful psychiatric study takes into consideration attitudes, adjustment difficulties, excessive fears, hidden anger, frustrated ambition—all of which may result in inner tension that may cause headache If in a careful personality evaluation, the psychiatrist finds that emotional problems are present

and that the headaches began about the same time the problems became acute, the psychiatrist can be of definite help in arriving at a diagnosis and thus deciding what treatment is appropriate

On the other hand, a patient may be referred because of headaches or other symptoms that the referring doctor believes are due to emotional and nervous causes The psychiatrist, failing to see the signs of emotional mal-adjustment, may find there is no such problem present He can point out the need for further diagnostic studies because he has helped rule out an emotional basis for the symptoms

I recall a patient who was referred to me because of headaches that his doctor thought were the result of an emotional depression This doctor believed that his patient needed special psychiatric treatment Careful study revealed that the patient did not have psychiatric illness but rather a brain lesion, which needed the attention of a brain surgeon (neurosurgeon)

We see, then, that the psychiatrist can participate in the medical team, along with his specialist colleagues, in an important way in the diagnostic appraisal of the patient

A second and important way that a psychiatrist can function in the medical team is by evaluating the patient's problem, then advising the patient's doctor how he may better manage the patient's nervousness and emotional instability A great many people afflicted with a nervous illness can be treated satisfactorily by their local physicians, but suggestions from a psychiatric specialist are often helpful to the local physician

A parallel could be found in the field of heart disease. The general practitioner can satisfactorily manage most heart problems if he has an occasional consultation with a heart specialist, who is better versed on the diagnosis and

treatment of heart disease

Every psychiatrist repeatedly sees patients in consultation solely for the purpose of clarifying the problem and giving directions in the patient's management to the general practitioner

The third way in which the psychiatrist assists his professional colleagues is by actively treating patients who for one reason or another cannot be satisfactorily managed by the local physician The patient may be so ill he needs to go to a psychiatric hospital for special treatment measures that the psychiatric specialist alone can give The psychiatric specialist is trained in using electro- and insulin-shock treatments, fever therapy for certain infections of the nervous system, and other special treatment techniques

Just as a surgeon may operate on a patient and then return him to the local physician for usual medical care, so will the psychiatrist use his special treatment techniques, and upon recovery of the patient refer him back to his local physician

In some instances a person deeply disturbed emotionally will need prolonged psychotherapy that only a specially trained psychiatrist can adequately give Psychotherapy is an understanding, talking-out form of treatment In it the patient gains a deep understanding of his distorted attitudes and ways of reacting His greater understanding helps along his desired adjustment

When the psychiatrist assumes the major and prolonged-treatment role, he is doing no more than his fellow specialist, for example, in the field of tuberculosis, who also assumes the major and prolonged-treatment responsibility of a tuberculosis patient

From these glimpses of the psychiatrist's duties, you may see the value of the psychiatrist in the medical team The patient should not be offended if his doctor wishes to have a psychiatrist's opinion This request certainly does not imply that the doctor thinks the patient insane or mentally incompetent Rather, it shows he is an alert, understanding person who is wanting to consider all possible causes of the illness in question, including the emotional

Help from a psychiatrist may be of tremendous value, and often determines the correct course of treatment

HIGH BLOOD PRESSURE

B J S

EVERY doctor is aware that blood pressure fluctuates with the emotional state of the patient, and civilization inhibits the expression of a person's primitive emotions Doctors treating mental patients have discovered that schizophrenics, who have no inhibitions, have no high blood pressure Coloured people in Africa have a low incidence of high blood pressure, whereas coloured people in the cities of the United States develop high blood pressure even more rapidly and severely than the white population City life is tense and difficult, and presumably more of a strain than jungle life But not everyone in a city becomes hypertensive Why do these people develop high blood pressure?

The hypertensive patient has deep-rooted emotional difficulties that are far in the past In contrast to the man who has an upset stomach or a peptic ulcer who is facing immediate emotional problems, the hypertensive's troubles are deeply buried and of long duration, and he conceals them behind a front of emotional calm

When asked whether he resents life or has any hatred or fears, the high blood pressure patient usually says "No" Yet his life situation may reflect an unhappy childhood in a background of poverty, experience with death at a young age, and a necessity to become self-reliant early—too early

He lives behind a mask, and may be inwardly fearful As a result of his abnormal drives, he may achieve material success early in life, yet remains fearful, any threat to his security, either actual or imagined, provokes severe anxiety

"A chronic repressed rage leads to chronic elevation of blood pressure," says Dr B W Murphy of the Royal Victoria Hospital, Montreal The hypertensive patient inclines toward action rather than reflection, and he conceals his defects behind a smooth social front Yet inwardly he is a tense and rigid personality

To live with his disease successfully the patient must by all means change his pattern of life and his resentments He may have to change his job so that it is not too demanding on his time and energy He may have to forgo the pleasure of resenting his mother-in-law, and be more tolerant of his wife He may need to sit down with his doctor, talk out his problems, and find out exactly where his life can be improved

Along with his medical treatment the sympathetic family physician frequently has to dispense old fashioned common sense in treating the hypertensive patient If he can get the patient to see the wisdom of relaxing and enjoying life, and not taking on heavy duties that overtax his nervous capacity he can do much to correct high blood pressure

But in the last analysis the patient must co-operate too, by changing his daily living pattern, his mental attitude toward life He must move from the high-pressure to the low-pressure area of living if he would bring his blood pressure back to normal

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FOOD HYGIENE

(Continued from p 7)

foods, such as spinach, string beans or meat The death rate is high, and treatment is unsatisfac-

tory Fortunately botulism is rare

A large group of diseases not classified as food poisoning are nevertheless often spread by food and water Pure water in civilized communities has nearly eliminated typhoid, cholera and dysentery The occasional case of typhoid reported today is generally traced to a carrier

In 1940 a milk-borne typhoid epidemic broke out in a certain town There were seventy-eight cases, with eight deaths In spite of this disaster the city council refused on the grounds of expense to install a pasteurization plant One could point out that the medical expenses for the seventy-eight persons ill and the funeral expenses for the eight deceased would more than have paid for the plant Meanwhile, the milk remains dangerous

Typhoid fever is not the only disease traced to milk Milk can also spread tuberculosis, undulant fever, septic sore throat, diphtheria, infantile paralysis and dysentery The great reduction in the incidence of hunchback and other forms of bone tuberculosis is directly related to the more general pasteurization of milk

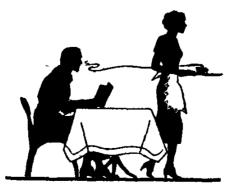
Most people have heard of Typhoid Mary, a notorious cook and typhoid carrier who failed to wash her hands after visiting the toilet She caused thereby numerous cases of typhoid fever and a number of deaths The health authorities finally caught up with her, and she was quarantined for life on Welfare Island, New York

There are few food handlers who *invariably* wash their hands after visiting the toilet unless they are specially trained and continually reminded Washing of the hands after the bodily functions should be a part of one's religion Ordinarily, dirty habits are just nasty, but if a "carrier" is involved, an outbreak of disease results

Dr Chapin, long-time health officer at Providence, Rhode Island, was one of the first to recognize the importance of contact infection There are numerous pointed paragraphs in his classic, *The Sources and Modes of Infection* He makes the startling statement that if our saliva and excreta were indigo in colour, our fingers would be continually blue

Bearing this fact in mind, we can easily see that, without being unduly finical, a technique should be followed in the kitchen and dining room as well as in a surgical operating room For example, tableware should be picked up by the handles, not by the part put in the mouth Glasses should be picked up by the base, not by the rims What have those fingers just touched? Side dishes should not be put on top of food, nor cream jugs put in the cups The bottoms of these utensils are not clean

Have you ever watched a careless waitress and the sequence of what her hands touched? One picks her nose, another coughs in her hand and moistens her thumb with her tongue, another makes change and handles dirty bills, then butters your toast Is she a "carrier," or does she pick up TB bacilli, streptococci, or diphtheria germs from the money she handles? If the bacteria are harmless, her habits are merely dirty, if the bacteria are dangerous, you may contract disease

It is a well-known fact that droplets are sprayed into the air when people talk Is your food protected from this danger? Customers pass in line at cafeterias and frequently talk over your food Cooks and waitresses may talk over it too

What would you think of a surgeon who, after carefully sterilizing his instruments, allowed insects to walk over them or allowed them to fall on the floor, or who operated without washing his hands, or who coughed and sneezed into the incision made for the operation?

I have, nevertheless, frequently seen flatware dropped on the floor, then picked up by the wrong end and put on the table without even a wipe!

Some dining rooms have a false appearance of cleanliness, but they are not clean so far as germs are concerned The milk is unpasteurized and standing in the sun, allowing germs to grow fast A cat and dog have the run of the kitchen Flies abound The knives and forks are handled by the wrong ends, the glasses by the rims Bad odours penetrate even into the spotless-appearing dining room Needless to say, at such places there are numerous cases of food poisoning, perhaps called "St Lawrence" fever or attributed to change of air

Restaurants are inspected, but homes are not, and your health officer cannot see all Most of the responsibility for clean food rests on *you*

The day is past when anyone without instruction should be thought capable of preparing and handling food This includes the housewife and her servants, for probably more cases of food poisoning caused by ignorance are in the home rather than in the restaurant, where food handling is inspected by the health department

Are you sure you are handling the family food in a sanitary way? Give your work habits a close survey, and assure health to your family

Tobacco stands indicted as a Ruthless Murderer

SAND in the GEARS

JAMES J. SHORT, M.D

(Second of Two Articles)

"NONSENSE I can give up tobacco any time I like It has never had a hold on me" That has a familiar sound, hasn't it? Although some people have given up the use of the weed after becoming thoroughly addicted, the number who have done so is relatively small. Multitudes of others have tried, but failed.

How familiar the cigarette slogans have become! Although one brand extols its alleged virtues and another ballyhoos certain other supposedly beneficial qualities, one common characteristic of the advertising is obvious The tobacco interests are on the defensive Their advertising is negative It disclaims certain harmful effects All of this is significant, and is a tacit admission by their propaganda departments that tobacco stands before the bar of public opinion indicted as an enemy of health

How many millions are spent in blatant advertising to break down public suspicion against tobacco we may never know. Jack Geyer, columnist, stated in a 1954 summer issue of the Los Angeles *Times* that $20,137,000 was spent for tobacco advertisements in newspapers alone in 1953 Of one thing we may be certain General enlightenment regarding the real nature of tobacco addiction and its frightful toll of human suffering from physical deterioration and economic waste has resulted in a telling blow to the industry and those who profit from it.

The brazen, soul-seared purveyors of exaggerated misinformation who write their advertising and coin their slogans have not yet had the effrontery to claim positive virtues for their poison—at least not to my knowledge

"If tobacco is so harmful, why do the doctors not take a firmer stand against it?"

A fair question that deserves a fair answer Two reasons are obvious One is that most doctors smoke Being just as much slaves to the weed as their patients, and finding it just as difficult to be free, they cannot forcibly advocate total abstinence from tobacco without appearing inconsistent. They therefore admonish their patients to cut down on the amount of daily consumption.

For certain conditions, however, your smoking medico usually does insist on total abstinence. These are Buerger's disease (a form of gangrene), stomach ulcer, and heart pain He looks for little improvement from these conditions as long as the patient continues to smoke He knows also that many functional symptoms are due to tobacco, and pronounces a taboo on it because of them Indigestion, jittery nerves, insomnia, headache, vague pains, and a host of other symptoms frequently disappear when tobacco addiction is finally overcome

Another reason for your doctor's apathy in encouraging complete cessation of smoking is the forlorn prospect of its accomplishment Frequent failure to overcome the smoking habit in the well-seasoned addict has produced this attitude But the outcome is so vital that this dismal possibility does not justify his giving up the attempt

As individuals, physicians frequently deplore smoking by themselves or their patients "I wish I didn't" falls from their lips often Doctors are becoming more opposed to tobacco because of the volume of clinical and scientific evidence rising against it The medical literature showing that tobacco adversely affects health is impressive

Some of the written evidence against tobacco is not known to the public, and the reason is not hard to find

A few years ago George W Gray, author of *The Advancing Front of Science* and *The Advancing Front of Medicine*, called upon me to inquire as to my researches in the fields of tobacco and public health He had been asked by the editor of a leading magazine to get the facts on this controversial subject His contribution, he said, was to be published in a certain issue some months hence

When it failed to appear I called Mr Gray to ask the reason His reply was that the result of his inquiries among leading scientific workers showed that their findings had been so predominantly adverse to tobacco that the editor had frankly informed him that he could not publish it Tobacco companies are heavy advertisers, hence news adverse to their interests must be played down if not suppressed altogether

There are those who argue that tobacco sharpens intellect or at least helps the thought flow But we cannot leave our smoking friends even that small comfort Comparisons with non-smokers prove otherwise

An extensive report bearing directly on this question is found in the book *Tobacco and Mental Efficiency,* by M V O'Shea, a former professor of education, University of Wisconsin

Professor O'Shea found so much bias and prejudice in then-current literature that he decided to make an attempt "to secure data on this subject which would not be coloured by prejudice or propaganda"

His investigations were extensive and well controlled, his conclusions fair to both sides But he was forced to the conclusion that "it is significant that in *every one* of the foregoing reports, smokers are shown to be inferior to non-smokers in the work of school and college" and "tobacco in school and college is always associated with poor scholarship"

Further, he stated that high school principals "could not overlook the fact that the records of the smokers in their schools were conclusive in showing that the use of tobacco by pupils is detrimental to intellectual effort, and in extreme instances it paralyzes mental activity"

"The smokers among high school pupils were not as a rule inferior in scholarship before they began smoking All the evidence indicates that tobacco exerts a retarding and disturbing influence on the intellectual processes of high school pupils," said Professor O'Shea

As to mature persons, the results of laboratory tests showed "that tobacco tends to retard and to disturb intellectual processes of the majority of them"

The direct testimony of mature smokers in various walks of life was conflicting, and Professor O'Shea believed that no final conclusions could be drawn from their opinions

Tobacco is under strong suspicion also as a cause of cancer In fact, there are many well-informed people who believe the case is

(Continued on p 21)

RINGWORM

PAUL D. FOSTER, M.D.

WILDFIRE is a better name for the disease that is neither ring nor worm

A MEDICAL misnomer that has become painfully familiar to thousands of families is ringworm, especially ringworm of the scalp This exceedingly annoying skin disease is incorrectly labelled It is not caused by a worm and often is not in rings (*although many skin disorders that are not ringworm do form rings*)

By its very nature, ringworm is an extremely difficult disease to eradicate It is caused by a tenacious little fungus that must be controlled and confined usually for months to keep it from spreading and to kill it Because it is very infectious, being easily passed from person to person, and most of its victims are children between the ages of six and eleven, the mere matter of preventing its spread becomes a major battle The disease recognizes no social, geographic, or economic boundaries Wherever children play and go to school together it may spread from one to another

The first sign of ringworm is a small scaly patch or a red pimple-like hair-bearing bump on the scalp This area rapidly spreads, turning grayish in colour and becoming covered with heavy scales and broken stubs of hair

At the first suspected sign of ringworm take the child to a doctor so that a diagnosis may be made and treatment begun at once To diagnose ringworm of the scalp the doctor has a special kind of ultra-violet lamp, called a Wood light He takes the child into a darkened room and focuses this light on the child's head Most types of ringworm will show up as a brilliant green, in sharp contrast to the surrounding hair and scalp A few other substances also reflect green under this light, such as lanolin and blood, but they are too obvious to be confusing

The treatment of ringworm of the scalp is long and difficult You must prevent the child from spreading his disease further to himself or others This means that you cannot allow one single infected hair to drop where it can infect someone else or to fall on a healthy part of the child's own scalp For this reason his hair must be clipped very short or shaved When you do this, take precautions to gather up all the cut hair and burn it

In the early part of the epidemic years the occurrence of ringworm created a serious social problem for children in may areas Because of the infectious nature of the disease as soon as a child was discovered to have ringworm he was whisked out of school and isolated from other children insofar as possible From the doctor's viewpoint the child with ringworm is healthy, he simply has a communicable disease of the scalp He feels well, is not incapacitated in any way, and is eager to continue his interests and exert his energies as normal children do His imposed isolation placed him under a handicap of missing valuable months of schooling, placed a stigma of "untouchability" on him, robbed him of a great many social outlets, and (some authorities believe) created a tendency toward delinquency as he rebelled against his cruel circumstances.

The care and treatment of the disease itself is trying enough for

(Continued on p 20)

What to Do for the COMMON COLD

J. WAYNE McFARLAND, M.D.

"OH, IT'S nothing Just a head cold And what an awful time to have one —with a carload of relatives coming! I haven't the slightest idea where I picked the thing up"

Have you ever said such words? More than likely you have, and probably you didn't have the slightest idea that the extra tension you were under in getting ready for the in-laws had anything to do with your snuffles But such is exactly the case, and now medical research can tell you how this whole thing works We now know that any extra tension load—whether overwork, lack of sleep, over-eating, or a quarrel with the neighbours—can change the body's defences and lay you wide open to attack by many types of organisms

Back to this head cold of yours The nose is a wonderful organ It houses the nerve endings of smell, it is the entrance for life-giving oxygen to the lungs and body, it is one of the escape hatches for poisonous carbon dioxide given off by the lungs, it acts as a very efficient air conditioner by warming, humidifying, and filtering the air

Gobind Lal
Randolph Turpin, contender for the World Middleweight Boxing Title, eats 20 grape fruit per day The vitamin C contained in citrus fruits help those suffering from colds.

The function of stopping dust and germs and preparing the air for the lungs requires a well-regulated filtering system The normal nose is just that, and a very fine one when treated properly

One of the important factors in keeping you from catching colds is the tiny microscopic hairs (called cilia) that line the entire nasal cavity, which includes the bony cavities in the face called sinuses Two, the maxillary, are located deep in the cheek-bone, and two others, the frontal, are just above and lateral to the bridge of the nose Then hidden deep in the bones are to be found the ethmoid and sphenoid sinus cavities

It is the job of the cilia, or hairs that line these sinuses, to be constantly waving ever outward a continuous stream of very fine mucus This sheet of mucus is actually a layer that lies on top of these fine hairs It is like a continuous belt that is on the move, being pushed forward by the movement of the cilia Germs, dust, and foreign particles are trapped on this layer of mucus, and are conveyed to the nasal passageway

So efficient is the cleansing action of this remarkable germ and dust trap that it can kill on contact many organisms To give you an idea of how remarkable this protective mucus and the cilia on which it rests really are, we take an illustration from Dr. Arthur W Proetz, a leading scientist in the

field of ear, nose, and throat diseases He compares the nose and its sinuses with a duplex apartment, the sinuses being the rooms He states

"These rooms have no doors, only ventilators. The wallpaper (mucus) in these apartments, miraculously, is self-regenerating As it forms, it slides slowly along the walls, to and through the ventilators, to merge with the paper in the hall From here it is unceremoniously thrown down the back stairs (throat) into the incinerator Fancy! clean carpets and wallpaper from cellar to garret every twenty minutes"

Dr Proetz continues by showing what would happen if the maxillary sinus in one cheek-bone, which is little more than an inch square, were a room ten feet square!

"It is dark, for the only communication it has with the outdoors is an eight-inch ventilator, and that opens under a penthouse in the hall

"The walls, ceiling and floors of this antrum are lined with the thinnest imaginable velvet, for the cilia even now are only 1/42 inch long and 1/300 inch thick And yet if one were to heave a washtubful of molasses and a bucket of sand into that room, they would mop it up, carry it across the floor and discharge it through the ventilator in a short ten minutes!"—*Essays on the Applied Physiology of the Nose*, pp 219-221

Whatever upsets this mechanism of the nose is going to produce trouble for you and me, and that's where a common cold comes in for some discussion The chemical reaction of the mucous secretions of the nose is normally slightly acid, but when we start out with a head cold, that secretion becomes alka-

Germs are everywhere Why do they ever gain a foothold?

line It also changes its consistency, becoming thick and heavy, and the little hairs cannot move it along It becomes a perfect hotbed for germs

What can change the mucous secretion to alkaline? Ah, that is where the quarrel with the neighbours, a week of too much tension, or lack of sleep plays a major role Scientists have by very fine instruments measured just such reactions on the nasal secretions From the normal acid side they change over to the alkaline reaction

Most of us have organisms in the nose that can produce head-cold symptoms But they never get a chance because our resistance is high When we are cold resistant, the secretions of the nose are acid, and we are keeping them that way by getting regular rest, by using a wholesome and adequate diet, and by controlling our emotions

Another factor in this complex problem of the common cold, and one not stressed enough, is a good circulation It has been found that the person who has cold hands and feet and who is sensitive to drafts has an abnormal circulation not only of the skin on the outside of the body but also of the skin lining the inside of his nose These persons would see a very interesting thing happen at the time they sit in a draft could they look inside the nose When their arms and legs are chilled, they have a constriction of the blood vessels in the skin of their hands and feet At exactly the time this is going on they would see inside the nose the blood vessels grow smaller and slow down Normal persons may have some slowing down of circulation when they are cold, but never does it last as long as in these cold-sensitive persons

When the circulation slows down anywhere in the human body, we are headed for trouble In the nose it means that those germs are ready to go to work

(Continued on p 28)

HOMEMAKERS' HELPS

RECIPES

Cottage Cheese Loaf

One cup unseasoned cottage cheese; 2 tablespoonfuls butter; 1 cup nuts, ground; 1½ cups tomato puree, 1 cup dry bread crumbs; 1 teaspoonful Marmite; 1 medium onion, diced; salt and sage to taste

Saute onion in butter Heat tomato puree sufficiently to melt the Marmite Mix all ingredients together and put in oiled baking pan Bake 15 minutes in 350°F oven Uncover and brown slightly at end of baking period Serve with gravy

* * *

"A lack of protein may create a craving for something sweet produce a feeling of chronic tiredness and lack of stamina, and is often accompanied by dizziness and weakness It may result in stunted growth in the young"

* * *

Cottage Cheese

Powdered skim milk may be used in making cottage cheese Clabbered milk for a starter may be obtained in the bazaar It is called dahi" When milk is soured and clabbered cook it over a slow fire - or in the oven at a very low heat until the whey separates Pour off the whey, put curd in a bag and let it dry for several hours without squeezing This may be stored in the refrigerator or in a cool place until needed To prepare for table use, season with salt and cream When the milk is clabbered it is well to retain a cupful for future starter The starter may be placed in the freezing compartment if it is not to be used soon

Cottage Cheese Rice Ring

One cup rice; 3 eggs; 1 cup chopped parsley or dhanya; ¼ cup butter, melted; 1 cup unseasoned cottage cheese; salt to taste; 2 cups milk.

Boil rice until tender, drain off water if necessary Beat eggs slightly, add milk cheese, parsley and mix with rice Add melted butter and pour into a greased ring Bake 350°F for 30 to 40 minutes Ring may be filled with hot creamed or buttered vegetable

Spaghetti and Cottage Cheese

Eight ounces spaghetti; 1 cup cottage cheese; 2 eggs; salt to taste, 2 cups milk

Boil spaghetti in rapidly boiling water until tender Drain Combine beaten eggs with milk, cottage cheese and salt Pour over spaghetti in greased baking dish Bake in moderate oven 1 hour

Noodles

Two eggs; 2 tablespoonfuls water, ½ teaspoonful salt, flour

Beat eggs lightly add salt and water Mix well and add sufficient flour to make a very stiff dough Roll is thin as possible— paper like thinness Cover and let dry half hour Roll in a tight scroll, slice and dry When needed place in boiling water and cook rapidly for 15 minutes

Spanish Noodles

Noodles, ¼ cup butter; 1 medium onion; ¼ cup flour, 1 Bell pepper; salt, 2½ cups tomato juice; 6 hard-boiled eggs; 1 cup cheese.

Chop onion and pepper fine and fry in small amount of shortening Mix with tomato juice and cheese, if available Blend the butter, flour and salt and mix with the tomato sauce Arrange a layer of cooked noodles, eggs, then sauce until entire amount has been used Bake until bubbly

Vegetarian Chicken Noodles

One cup noodles; 2 tablespoonfuls butter; 2 cups potato water; 1 egg, beaten; 1 cup cooked channa; salt.

Add salt and butter to potato water Bring to boil, then add noodles Cook until tender Stir the beaten egg into the boiling noodles Add channa with its liquid

Noodles in Egg Gravy

Two tablespoonfuls oil, 1 onion, minced; 1 egg; 2 tablespoonfuls flour; 5 cups water, Noodles made with 2 eggs

Fry onion in oil in a large sauce pan Add egg and stir until it is finely stirred Add flour, a little cummin if desired, and fry until egg is brown Add water When water boils add noodles Serve with tomato sauce and squares of nut roast Cooked channa may be added

Spanish Rice

One cup rice; 1½ cups liquid (water and tomato juice), minced green pepper and onion; 2 tablespoonfuls fat.

Slightly saute green pepper and onion in fat in pressure cooker Add rice and saute to light brown Add liquid and bring pressure up to 15, allowing pressure to remain only 2 minutes Reduce the pressure and serve immediately This is a dry, flaky Spanish rice

Lentils

One cup lentils; 2 cloves of garlic; 1 teaspoonful Vegex or Marmite; salt.

Combine ingredients cover with water and cook until tender If simmered over a low fire the flavour will be better

Macaroni and Parsley

Eight ounces macaroni; 1 cup parsley, minced; 1 clove garlic, oil or cream, salt.

Boil macaroni in salted boiling water Wash in cold water and drain Return to fire, add oil or cream, garlic and salt and lastly the minced parsley Serve immediately

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RINGWORM

(Continued from p 16)

a small child without the added complication of his being placed in a social vacuum The second step in handling this problem was

to allow infected children to attend school, but only in "ringworm classes" This plan did not work out, for it was impossible to prevent the infected children from coming into contact with the non-infected children outside the classroom

Fortunately the prevailing attitude now is to permit the child to attend regular school-room classes as well as go to public places and associate with other children so long as proper precautions are observed

The best and quickest treatment for ringworm of the scalp is the total (but temporary) removal of the hair by X-ray treatment Because the fungus infection penetrates the hair shaft both above and below the skin, the entire hair, roots and all, must be destroyed However, this treatment may not be available, and it should never be attempted by anyone but an expert An over-dose of X-ray can be dangerous and can produce permanent baldness

The second best treatment is one that will be recommended by your family doctor, your skin specialist, or a clinic It involves keeping the child's head closely shorn and giving him daily night and morning shampoos with a sulfated oil soap followed by the application of a salicylanilide ointment, which is rubbed into the entire scalp, with special care given to affected areas Sterilization is an important part of the treatment Boil clippers, razors, towels, and caps for at least ten minutes after each use A cap on the order of a stocking cap must be worn by the child at all times, including his sleeping hours You must boil these caps before washing after each use, and put on a clean one at night and in the morning If stocking caps are offensive to your child's vanity, use a reasonable substitute—a sailor cap, for example—provided it can be boiled and is sufficiently large and close fitting to cover the entire scalp without slipping The child must understand that he must neither remove his cap nor move it around on his head

In a local epidemic of scalp ringworm, keep your unaffected child away from public places as much as possible Ringworm infection abounds not only in barber-shops where conditions are insanitary but also in places where hair is likely to fall or touch a child's head, particularly the backs of seats in public auditoriums and public transportation vehicles

Control of ringworm of the scalp is actually a community effort, in which health officials, parents, and children must all work together willingly Only by a united effort can the disease be intelligently handled and the danger of future epidemics eliminated

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SAND IN THE GEARS

(Continued from p 15)

proved and the criminal convicted What are the facts?

Cancer is produced by chronic irritation to susceptible tissue For many years it has been recognized that cancer of the tongue occasionally develops at the site where a pipe stem comes in contact with it It was thought that the prolonged irritation of smoke upon the tongue provoked the cancer Before the actual development of the cancer there frequently appear sores called leukoplakia, or smokers' tongue These sores, generally recognized as a precancerous condition, can frequently be made to disappear by the elimination of tobacco But unless the use of tobacco is stopped there is no hope

Forty years ago cancer of the lungs was considered a rare disease It has increased rapidly, until it constitutes an important portion of all cancer mortality A study of 7,398 autopsies by Dr. Philip B Motz of the United States Veterans Administration showed that lung cancer increased 1[illegible] per cent in the period from 19[illegible] to 1937, whereas cancer as a whole had increased only 28 per cent In Dr Motz's series, lung cancer comprised 13 per cent of all cancers

The explanation for this appears to be fairly obvious Anyone who has examined a well-smoked pipe has noticed the large amount of tar deposited Tar is a well-known factor in the production of skin cancer among those who come in contact with it, such as road workers When it is applied to the skin of cancer-susceptible animals it will readily produce cancer

We can reasonably assume that tobacco tar, carried into the lungs, may well be a factor in the production of cancer of the lungs Increase of lung cancer coincides with increased consumption of cigarettes

Although medical literature has for many years carried articles pointing out the dangers from tobacco, not much filtered through into the lay press Recently the violent reactions of physicians, scientists, and statisticians to the tobacco evil could no longer be suppressed Newspapers are at last giving out the findings and opinions of those best qualified to judge such matters Although it is only fair to say that medical opinion is not unanimous in condemning tobacco, a look at the record, in my opinion, leads to only one conclusion

Physicians in England recently made an extensive survey of lung cancer and concluded that the incidence among smokers is much greater than among non-smokers In fact, they stated that incidence in non-smokers is negligible

E C Hammond, Sc D, and

(Continued on p. 24)

SWEET CAVITIES

JUDSON KLOOSTER, D.D.S.

THE eating of sweets is a characteristic of the modern way of life. It is not altogether a desirable one, though it is magic to many small children! Unlike the rest of our foodstuffs, sweets are most often eaten between meals and at odd hours. Because we do not habitually brush our teeth after our between-meal snacks, the sticky sugar mass clings to the tooth surfaces between teeth and at the gum line, helping to form new cavities.

The sugars promptly produce acids, which etch the enamel surface. This leaves tiny rough niches, in which decay bacteria can start their insidious work. Even though the mouth is rinsed with water, enough sugary deposit remains in the little crevices and between the teeth to carry on this harmful process.

Why do dentists talk so much about the harmfulness of sweet eating? Are sweets the only things that harm our teeth? No, almost any food left as debris in the mouth after eating may help to produce dental disorders. Sweets are more harmful than many of our foods because sweets have a sticky texture and because they are usually eaten between meals, when we cannot conveniently clean the mouth. The high concentration of refined sugar in sweets and chewing gum makes them special targets for criticism. A stick of chewing gum contains the equivalent of a half teaspoonful of sugar. These sugars are the most readily converted in the mouth to the acids that etch the teeth.

Other foods sharing this condemnation are cakes, pies, biscuits, soft breads, gravies, and potatoes. All these sweet or starchy foods have materials in them that are easily converted into sugar acids in the mouth. All of them form a film on the teeth that is not removed by simply rinsing the mouth. And none of them have the fibrous texture so necessary to provide exercise for the gum tissues.

Perhaps you did not know that the gums need exercise just as other parts of our bodies do. In times of more primitive civilizations, people did not cook their foods so mercilessly as we often do nowadays. They ate more raw fruits and vegetables. Their bread was coarser, and required harder chewing. They had less pyorrhœa! Today we mash, chop, shred, slice, and puree our foods until the teeth no longer have much to do in mastication. Instead of eating whole raw carrots, we often shred them or cook them. And the amount of disease in the tissues about the teeth, such as pyorrhœa, grows larger as we continue these bad habits.

Chewing is important to keep the mouth healthy. The gums need the exercise of chewing carrots, celery, lettuce, coarse breads, and apples. And good tooth brushing is another valuable form of gum exercise. Only by the stimulation of exercise can the blood circulation be kept active and tissues healthy. Teeth that are not allowed the work of chewing may become loose, because the bone around them cannot stay healthy without exercise. Nature tends to destroy anything the body does not use. The time to take care of our teeth is while we still have them in good condition.

There are two general classes of dental disease. The first is disease of the teeth themselves, namely decay, and its results. The second is disease of the gums and bone support of the teeth. Such diseases as gingivitis and pyorrhœa fall in this class.

We can see that our eating habits may play an important role in causing diseases of both kinds. If we eat many sweets and fail to brush our teeth promptly, we may expect to have a higher rate of dental decay. If we neglect to eat

AVOID THESE!!
THEY CAUSE
DENTAL CARIES

Let's take a straight look at this matter of sweets and your teeth.

foods that need real chewing, and leave food debris around the teeth to irritate the gums, we may expect problems in the tissues about the teeth

"But," you say, "what about my friend Sam? He eats lots of sweets and brushes his teeth only once in a while, and he never has to go to the dentist!"

There are some people whose natural resistance to decay is great enough to withstand decay-producing influences without having cavities form in their teeth Unfortunately, only a very small percentage of people are so immune to decay The inherited immunities or resistances to decay vary somewhat among various persons Decay may progress rapidly in some mouths, and more slowly in others In any case, the rate of decay is hastened by bathing the teeth in a film of sugar or starch We do well not to presume too much on our natural resistance to decay

Is all decay caused by the eating of sweets and poor tooth brushing? Of course not There are many factors that help cause cavities Some of them are unknown, and some are beyond our control For example, we cannot choose our parents, and so have no control over hereditary influences We must work with the factors we can

B I S
Take your child for a regular check-up of his teeth and make sure that all cavities are given early attention.

control—proper diet and good tooth-brushing habits

Vitamins and minerals are needed to keep the gums healthy Vitamin deficiencies often are first detected by symptoms in the mouth A diet low in calcium and vitamin C results in soft, flabby gums, which bleed readily when brushed This condition improves rapidly with proper tooth brushing, gum massage, and the use of oranges and apples in place of starchy foods and candy Our diet should allow for only a small amount of cake-sweets-pie desserts Fresh and dried fruits are much more healthful, both systemically and dentally

Perhaps it is not necessary to eliminate quite all the sweets from our meals What is necessary is to stop eating too many sweets, to stop eating between meals, and to thoroughly clean the mouth immediately after each meal. Drink milk regularly Your dentist will be glad to teach you good brushing methods Both your physician and your dentist may suggest improvements in your diet Remember to include hard foods for gum exercise as well as foods needed for good nutrition

A friend of mine told me that his shop sells a large quantity of cheap sweets every day to children at a nearby school! Can this be why our kiddies have so many holes in their teeth? Children form a taste for sweets during their infant years, just as they learn to like other types of food If children are not introduced to sweets

**USE THESE !!
THEY BUILD
STRONG TEETH**

until school age, there is a good chance that they will not crave sweets then. It is not practical for children to brush their teeth six or eight times a day It is better to teach them to eat only at meal-time This is the programme of health from every viewpoint

This advice is intended to help you keep your teeth Your own teeth are far superior to any substitutes But remember No one can preserve your teeth for you, not even your dentist It's up to you—they're *your* teeth!

SAND IN THE GEARS

(Continued from p 21)

Daniel Horn, Ph D, reported from the Statistical Research Section, American Cancer Society, New York, on a follow-up study of 187,766 men between the ages of 50 and 69 years Although their study was not completed, they reported in the *Journal of the American Medical Association* for August 7, 1954, that an analysis of information then available indicated that "the over-all death rate, the death rate from diseases of the coronary arteries, and the death rate from cancer are much higher among men with a history of regular cigarette smoking than among men who never smoked" They believe their findings represent cause-and-effect relationships

Dr. Alton Ochsner of the Ochsner Clinic in New Orleans, who as a surgeon has had extensive experience in removal of lung cancers, has a similar but much more emphatic conviction He believes the Government may eventually be obliged to intervene to halt this needless, insidious, but definite, carnage

Henry Lee, a lay writer, stated in *Pageant* for February, 1954, that recent clinical and statistical evidence shows that only one in 10,000 non-smokers would die of lung cancer in the year but as many as one in 300 heavy smokers would die of lung cancer in the same year

There are many more such articles in recent literature If you are interested in reading them, you may do so at any good medical library

But perhaps the greatest inroad on life and health by tobacco is found in its effect on the heart Along with the striking rise in cigarette smoking of the past thirty years there has been an alarming and abrupt rise in deaths from disease of the coronary arteries These arteries, it must be remembered, have the important duty of supplying blood to the heart muscle itself Any shortage of blood supply to the heart muscle will rapidly produce damage to the muscle A sudden closing of one of the larger branches of a coronary artery may produce sudden death The importance of these vessels can hardly be over-emphasized

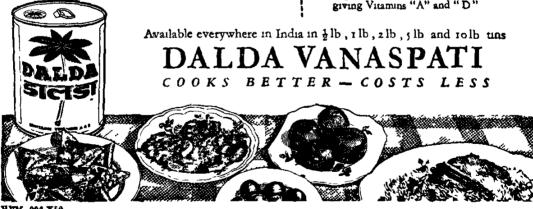
Is there any relationship between the great increase in cigarette smoking and the similar increase in deaths from coronary artery disease? Are the two purely accidental? Let's look at the record

Dr J P English and co-workers of the Mayo Clinic in 1940 published the article "Tobacco and Coronary Disease" They found in their studies a greater incidence of coronary disease among smokers than among non-smokers in the younger age group—those under fifty Coronary disease was greatest among excessive smokers, least among non-smokers, and intermediate the non-smokers

Dr Harry J Johnson in 1940 published a study of 2,400 electrocardiograms of apparently healthy males, from observations made at the offices of the Life Extension Examiners of New York He found that there was a fifty per cent increase in abnormal electrocardiograms in the smoking group over the non-smokers

Dr Bellet and co-workers in 1941 published the results of their studies of tobacco smoke and nicotine on the heart They found that in a heart muscle already damaged, marked electrocardiograph changes were obtained with a dose of nicotine or tobacco smoke that was one fourth of the amount required to produce only slight changes in normal heart action In other words, if your heart is already damaged, beware!

Older men are dropping out with increasing frequency from degenerative heart disease This fact accounts largely for their excessive mortality as compared to women But such disease is not increasing among the older generation of women Perhaps the risin-

army of women smokers, the younger generation, will provide the final answer How sad that they should become human guinea pigs and victims of insidious poisoning to provide an answer to this difficult problem!

Today many children are hardly out of the cradle before they take up smoking Casual observation shows many school children in the lower grades puffing at cigarettes More than this, it has been reliably stated that babies themselves get their daily dose of nicotine while at the breasts of their doting mothers Exaggerated? Not a bit Remember that nicotine is one of the most potent poisons known, and that a relatively small amount of it can produce symptoms Certain digestive disturbances in nursing infants have been traced to nicotine secreted in the

mother's milk Perhaps a fitting paraphrase of an old adage might be, "The hand that holds the cigarette ruins the infant"

What is the probable mode of action of tobacco in causing heart impairment? The answer in part is the narrowing of the arteries going to the heart muscle Just as after a smoke the vessels in the skin can be seen to narrow and obstruct the blood flow, so those of the heart muscle also may become constricted and obstruct the flow. If the vessels are already thickened, a slight additional narrowing may be sufficient to produce a major blocking effect.

Many are the evils of tobacco Scientific articles and books on the subject are so numerous that space will not permit even a reference to many of them One thing that appears clear beyond the shadow of a reasonable doubt is that Lady Nicotine stands condemned before the bar of science as a vicious saboteur She has proved herself to be expensive, dangerous and deadly destructive The only safety is in making a complete break with her

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1 This question and answer service is free only to regular subscribers

2 [illegible] attempt will be made to treat disease [illegible] take the place of a regular physician [illegible] individual cases

3 All questions must be addressed to The Doctor Says [illegible] correspondence personally with [illegible] is not available through this service

4 [illegible] personal answers are [illegible] ADDRESSED AND STAMPED ENVELOPE [illegible] answers cannot be [illegible] ONE MONTH

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[illegible] will be published [illegible] to be of [illegible] without objection but no name [illegible] Address The Doctor Says, Oriental Watchman and Herald of Health P O Box 35 Poona 1

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AIR SWALLOWER Ques —"In the April issue of "HEALTH" you answered a questioner who complained of gas trouble You asked him if he was an air swallower etc May I know how one can be called an air swallower? What makes one such? What is the cause and remedy"

Ans —One becomes an air swallower as a result of nervousness, which manifests itself in this unusual way Many times those afflicted do not realise what they are doing One, when this is suggested to him can by closely observing himself usually tell whether he is indulging in air swallowing or not Anyone who belches considerably is probably an air swallower The habit can be broken by exercising a little will power

?

ORCHITIS Ques —"I am suffering from Orchitis accompanied by fever This is the first attack that I ever had My physician has declared that it is due to Filaria Some people are of the opinion that Filaria is incurable and can only be suppresed for a time Kindly give me your opinion and advice I would like to confirm my physician's conviction, i e whether Filaria is now really incurable I will be 45 years of age by next September"

Ans —The Orchitis of which you complain is probably due to Filaria It is also probable that you have become infected some months or years before this difficulty. Filaria is transmitted by the bite of an infected mosquito One infection may not cause much in the way of symptoms Repeated infection over a period of years may result eventually in "big leg" or massive swelling of some other part of the body

The organisms grow to maturity in the lymph channels, and in time the female produces the young in enormous numbers, which give rise to temperature and other symptoms It is extremely difficult to kill the adult worms, but in time they die of themselves. Probably the most successful treatment is the use of Hetrazan or Banocide tablets three times a day for four weeks Even more important than taking the tablets is the necessity of sleeping under a net to prevent the mosquito becoming infected and transmitting the disease to others and also to prevent repeated infections which will cause greater trouble in the future

?

WEAK HEART· Ques —"My heart is weak I feel so What exercise, diet, or medicines should I take?"

Ans —How do you know your heart is weak? This could only be determined by an examination by a physician Many complain of weak heart when poor nutrition or something else is responsible for their condition Of course, there is such a thing as a weak heart, which may be due to anyone of a number of causes, such as high blood pressure, rheumatic fever, obesity, syphilis, or as a result of certain infectious diseases, etc. The treatment may vary according to the cause The cause should be removed, and unless the heart is damaged too much, it may recover its strength to a normal state I would suggest that you see a qualified physician, who can make the proper diagnosis and prescribe the treatment indicated

?

NASAL ALLERGY Ques —"In every changing season between February and April I am attacked by what my doctor calls allergy It attacks my nose and one nostril remains mostly closed, sometimes both are blocked Will you suggest some precautions so that I may be saved from this trouble in future?"

Ans —I too am suffering with nasal allergy My trouble begins in the middle of August and lasts until frost in cold countries Here I am bothered only when in higher altitudes such as Simla, Mussoorie Bangalore, etc

If one cannot move or go to some other climate during the hay fever season, I would suggest the following programme (1) Pyribenzamine tablets by Ciba Take ½ or one tablet every four hours or as needed Personally I can get along very nicely on half a tablet two or three times a day (2) Some good nasal drops such as Neosynephrine ¼%, three or four drops in each nostril every four to six hours gives considerable relief (3) Massive doses of Vitamin C help some people I would suggest 200 mgm every eight hours.

SPARKLING DRINK ends 'hot-weather stomach upsets'

IN the hot weather, your stomach is easily upset Your mouth feels unpleasant and you tend to become sluggish and lazy. Eno settles the stomach and tones up the system, keeping it active and healthy

Eno is a mild, efficient antacid. It gives quick, positive relief from acid indigestion, 'heartburn' and gas in the stomach In just eight seconds it makes you feel better – not just your stomach but your mouth, too!

If you overeat — or eat something that doesn't 'agree' — Eno's special *buffering action* helps to put things right If you need a mild laxative, take a slightly larger dose on an empty stomach Always keep Eno's 'Fruit Salt' handy.

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KIDDIES' KORNER

ALL OVER AGAIN

ARTHUR S MAXWELL

RICHARD came home from school looking very blue

"What's the matter?" asked Daddy

"Failed!" said Richard

"Failed in what?" asked Daddy

"Arithmetic," said Richard in disgust "Got to take the examination all over again"

"Well, what happened? Why did you fail?"

"I suppose I didn't give the teacher as many apples and flowers as the other kids did"

"I don't think it's a matter of apples and flowers," said Daddy "There's another reason"

"What?" asked Richard

"Preparation," said Daddy, "or the lack of it"

"Well, don't I study?" said Richard "Don't I study as much as the others do?"

"Maybe so" said Daddy, "but not as much as you need to As I've told you a dozen times, you play too much and study too little"

"Who wants to study, anyway?" said Richard, walking off in a huff

"Oh, just a minute, Richard," said Daddy "I want you to help me with a little job for a few minutes"

"What is it?" asked Richard suspiciously

"Mixing some concrete You know, we have to re-lay that slab outside the back door that cracked all to pieces the other day"

They mixed the concrete just outside the garage Daddy shovelled in the gravel and Richard the cement

"Let's not forget the formula," said Daddy "Three parts of gravel and one of cement"

"Why do we have to be so particular?" said Richard

"Because that's the way to make good concrete," said Daddy

"Why don't we put in ten parts of gravel and only one of cement? Wouldn't that save money?"

"It would save money to start with," said Daddy, "but we would soon have to do the job all over again So it would cost us more in the end In fact, the only reason why we have to do this job now is because somebody did a poor job before Probably the person who made that slab outside the back door never bothered to measure the amount of gravel and cement he put in, or he didn't mix it properly, or he made it too wet Somewhere in the process he didn't make the right preparation And that's why it all broke to pieces and we have to do the job again"

"Are you trying to tell me something about getting ready for examinations?" said Richard with a sly grin

"Why, Richard," said Daddy, grinning back at him, "whatever made you think that?"

"Oh, it just sounded like it," said Richard

"Funny," said Daddy. "The fact is that mixing concrete and getting ready for examinations are very much alike. To prepare for examinations you have to put in just the right amount of study and the right amount of play. Otherwise you'll never succeed About three to one, I would say The study will get your mind ready for the examination, and the play will help to keep you in good trim If you put in too much play and too little study, the result won't stand the test of time—or of examinations"

"I guess I didn't put in the proper amounts last time," said Richard

"But you can try again," said Daddy

"I surely will," said Richard "And next time the mixture will be right"

WHAT TO DO FOR THE COMMON COLD

(Continued from p 19)

Can we do something to ward off colds? Is it possible to change from cold-sensitive and cold-susceptible to noncold-sensitive? I am glad to tell you that you can do something and the first thing I want to mention is getting adequate rest

In all the experiments conducted on human beings to discover what could be done to help them build up resistance to the common cold, one factor cannot be overlooked It is rest Fatigue causes an imbalance in circulation, particularly chronic fatigue such as one would have from loss of sleep

Even more interesting were the tests run on persons who had many head colds When these persons in the experiments were lying down and at rest, the secretions of the nose would always return toward the normal acid reaction But if they got up and continued their everyday activity, the secretions of the nose stayed abnormal, alkaline,

and it took longer for the secretions, or mucus, to finally become acid That means the cold hangs on

For rule No 1 we say, Get *regular* hours of rest A haphazard programme of eating, sleeping, and recreation tends to frustration and fatigue And fatigue and exhaustion are at the opposite end of the scale from rest For cold prevention the rule is plenty of physical rest

We should point out very clearly the effects that emotional tension can have on a person I imagine that emotional tension is one of the big factors in frequent colds

A certain man who was part of the experiment on colds had been following faithfully the instructions given to build up his body resistance The tests the scientists performed showed that his circulation had improved and he was getting along very well, being free from sniffles for quite a period of time Then again he began to have one cold after another The physicians checked the man's programme for preventing colds He hadn't slipped up on anything, his schedule was exactly right Yet he was having colds, and the tests showed poorer circulation in the nose But how to account for this condition?

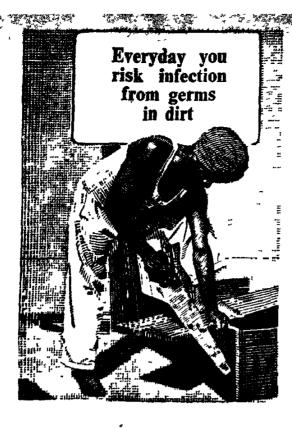
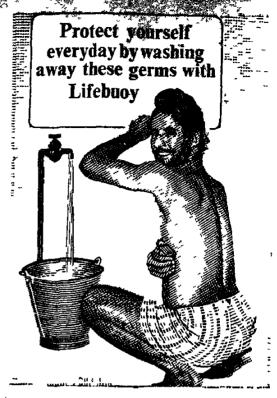
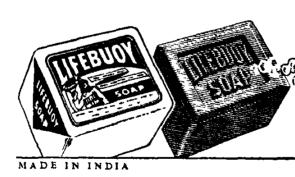
Finally they checked on his emotional health, and discovered that he was very much worried about his work as a teller in a bank The colds started up when he began to worry about his work, and they stopped when his work situation was changed

This experience shows you how directly your thoughts can affect circulation of the nose In a cold-susceptible person there is a direct relationship between head colds and head thoughts!

Our second rule then would read, To prevent or recover from a cold, mental rest is as important as physical rest

The next point is that the body cannot function normally without an adequate diet We used to speak of certain vitamins as being especially needed by those suffering from colds, and in a way that is true These are vitamin A (as found in any highly coloured fruits and vegetables) and vitamin C (as found in citrus fruits) But now we learn that it is important to have all the vitamins and minerals Besides this, a balance of protein, fat, and carbohydrate is still a big factor in good body resistance

In one experiment the scientists found that in the cold-sensitive group a high sugar or carbohydrate diet caused an increase of cold symptoms This points up the fact that if you are one of these sus-

ceptible-to-colds persons, less white sugar, candy, cake, pie, and ice cream should be one of your rules. For general health the average person eats far too much sugar and not enough of protective foods, such as fresh fruits and vegetables.

If you wish additional vitamins and minerals in tablets or capsules, that is quite all right. And to be sure you are getting the right amounts, you should consult your family physician.

Our third rule in fighting a cold is, Select a diet liberal in vitamins and minerals and low in sweets.

In our next article we will gi you more practical hints on pr venting and treating a cold.

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THE PROBLEM OF SIN AND THE WAY OF SALVATION

C. S LONGACRE

ONE of the most perplexing questions that has puzzled the minds of human beings is, "Why did an all-wise God permit sin to enter the universe?" How could a God of love permit such a hideous thing as sin to arise, with all its evil consequences, its woes, miseries, sorrows, sufferings, and its final end—death? It is hard for finite minds to comprehend God's way of solving the problem of sin Infinite Wisdom did not see fit to prevent sin from coming into the universe of God Since "God is love," and, as Moses said, "His work is perfect a God of truth and without iniquity, just and right is He," all that God does must be just, right, and prompted by a motive of love

God could have prevented sin by making human beings and angels automatons or mechanical robots without brains, without the privilege of thinking thoughts of their own, without the power of choice as free moral agents, moving only by divine direction We would thus have been just machines and tools in the hand of God, like any other tools or machines in the hands of men How much pleasure does a mechanical robot enjoy? None whatever! It has no brains, no privilege of choosing or enjoying anything It has no feeling, no thoughts, no pain, no ecstasy, and no happiness God knew there would be no pleasure or happiness for Him, or for the beings He created, if there were no voluntary thought and action and moral freedom

God could have destroyed the first sinner and every subsequent one as soon as lust conceived sin in the heart He could have nipped evil in the bud before it brought forth its fruit. But if God had dealt thus with sin in its very conception, and before it openly manifested itself, what would the rest of His creatures have thought of Him? Would they have understood God as a God of love if, in such a seemingly arbitrary manner, He had blotted His creatures out of existence? Would they not have looked upon Him as a tyrant, and not as a God of love and mercy? Would they not thereafter have served Him from the motive of fear and terror, rather than from love in their hearts?

God's kingdom is based on the principle of love, and the only service that God accepts is one motivated by love God does not want anyone to serve Him whose allegiance does not rest upon a conviction of His justice, love, and benevolence When the God of heaven proclaimed His name to Moses on Mount Sinai, He revealed that He was "The Lord, the Lord God, merciful and gracious, long-suffering, and abundant in goodness and truth, keeping mercy for thousands, forgiving iniquity and transgression and sin, and that will by no means clear the guilty" Exodus 34 6, 7

If God had blotted Lucifer (whom He created "perfect," but who was the first sinner) out of existence when sin first appeared in his heart the inhabitants of heaven and of the unfallen worlds would never have understood sin's nature and evil consequences and the necessity of punishing it Lucifer charged God before the angels as being arbitrary and unjust in requiring His creatures to obey His commandments, so that they were not free to do what they pleased Therefore God had to allow sin to manifest itself openly and to become an object lesson to all the inhabitants in the universe of God, a perpetual demonstration of the evil nature of sin and its fearful results

God has promised that, after its future ultimate destruction, sin is not to lift its head a second time In referring to the final overthrow of sin and all God's enemies, the prophet asks "What do ye imagine against the Lord? He will make an utter end affliction shall not rise up the second time" Nahum 1 9 God, in His wisdom and foreknowledge, saw that the rebellion against His kingdom could only be solved for time and eternity by permitting sin to manifest itself in all its hideousness, serving as a perpetual reminder to all the inhabitants of this world and the unfallen ones, and thus demonstrate that Satan's charges against God are false, and that His government is just and perfect

God is a God of peace, and not until the problem of sin is solved will He set up His everlasting kingdom Then universal peace will permanently reign everywhere, fulfilling the divine promise, "They shall not hurt nor destroy in all My holy mountain for the earth shall be full of the knowledge of the Lord, as the waters cover the sea" Isaiah 11 9

"Nation shall not lift up a sword against nation, neither shall they learn war any more But they shall sit every man under his vine and

under his fig tree; and none shall make them afraid: for the mouth of the Lord of hosts hath spoken it." Micah 4 3, 4

Then the righteous "shall fear Thee [God] as long as the sun and moon endure, throughout all generations In His days shall the righteous flourish, and abundance of peace so long as the moon endureth" Psalm 72 5, 7

The reason God permitted sin to enter the universe through the creation of free moral agents, giving them the right and privilege of choosing good or evil, was to develop a character that would endure any test in the future, and enable them to comprehend more fully the fathomless love of God in giving His Son to die for the sins of the world

The Apostle Paul tells us that "God, who is rich in mercy, for His great love wherewith He loved us, even when we were dead in sins, hath quickened us together with Christ, and hath raised us up together, and made us sit together in heavenly places in Christ Jesus, that in the ages to come He might show the exceeding riches of His grace in His kindness toward us through Christ Jesus" Ephesians 2 4-7 Thus during eternity God will unfold His great love in giving His only begotten Son to die for us that we should not perish but have everlasting life Eternity will not be long enough to bring us a complete revelation of the boundless and inexhaustible love of the Father for poor and unworthy sinners

The beings on the unfallen worlds and the angels in heaven may sing "Holy, holy holy, Lord God Almighty, which was, and is and is to come" But in the words of the familiar song "When I sing redemption's story, they will fold their wings for angels never felt the joys that our salvation brings" The experience of redemption from sin is a joy which no unfallen being ever experienced Jesus said that those "to whom He forgave most love Him most" Luke 7 43, 42 We would never have known the exceeding riches of God's grace were it not that "where sin abounded grace did much more abound" Romans 5 20 O grace, marvellous grace God's grace that is greater than all our sins! None can wander so far into sin but the grace of God can reach and reform them, if they wish to be reached and transformed Such is the matchless love of God for sinners.

It was impossible to solve the problem of sin when it began Its hideousness and terrible consequences had to manifest themselves in order to be understood It took millenniums to demonstrate the awful results of sin and fully unmask the arch deceiver before the inhabitants of the universe of God When the redeemed are finally delivered from the hand of the great enemy and stand on the sea of glass before God's throne, and divine judgments are poured out upon their enemies, the saints exclaim "Who shall not fear Thee, O Lord and glorify Thy name? For Thou only art holy, for all nations shall come and worship before Thee, for Thy judgments are made manifest" The saints of God will then vindicate the justice of God as they sing the song of Moses and the song of the Lamb:

"Great and marvellous are Thy works, Lord God Almighty, just and true are Thy ways, Thou King of saints"

There is no longer any doubt in the minds of the redeemed, who have passed through the time of Jacob's trouble in the final conflict between Christ and Satan, concerning the righteousness of God's judgments and the way God deals with the unrepentant in eliminating sin from this world

God does not leave any question of truth or error unsolved in the controversy between Him and those who rebelled against His law and authority The fearful consequences of

(Continued on p 34)

How about God's Share?

D A Delafield

ALVIN DARK, field captain and shortstop of the world champion New York Giants, is a believer in the old fashioned Bible principle of tithe paying

On the morning after the final game with the Cleveland Indians in which the Giants won the World Series, Dark hurried over to the Calvary Baptist church and addressed a class of boys in Sunday school He told them that he started earning $2 50 a week as a newsboy and gave twenty cents in tithe From that time on he has practised tithe paying, or, as he calls it, "giving ten per cent of my earnings to God" It is reported that Mr Dark gave ten per cent of his World Series bonus, or about $1 000, to a Southern Baptist church in his home town of Lake Charles, Louisiana

We admire Mr Dark for his liberality But, believe it or not, there are many thousands of Christians and Jews in all parts of the world who follow the same practice When you stop to think about it, ten per cent for God and ninety per cent for Alvin Dark isn't unreasonable, is it?

According to earthly arithmetic, you lose when you pay tithe According to divine arithmetic, you gain every time Here is the Bible promise that proves it "Bring the full tithes into the storehouse, that there may be food in My house, and thereby put Me to the test, says the Lord of hosts, if I will not open the windows of heaven for you and pour down for you an overflowing blessing I will rebuke the devourer for you so that it will not destroy the fruits of your soil, and your vine in the field shall not fail to bear, says the Lord of hosts" Mal 3 10, 11 R S V

The Creator gives us power to make a living He also gives us life Heartbeat follows heartbeat and breath follows breath because moment by moment He sustains us That mental and physical exertion which brings the weekly or monthly pay check is possible only because we receive life from God Then why shouldn't we recognize our dependence on Him by gifts to His cause particularly the tithe, or the one tenth which He claims as His own for the support of His church? Think of it when we tithe we enter into business with God We become junior partners with the Life-giver

The Senior Partner in this arrangement can declare, "All the silver and the gold is Mine all the cattle on a thousand hills, and all the beasts of the field and the forest" He is able to make the material as well as the spiritual resources of heaven and earth available to us It takes faith to believe this But if you will test His word, you will find it true So tithe my friend Imitate the example of Alvin Dark and other conscientious people who cheerfully discharge their obligation to the One who gives us life and breath and all things

Men Who Proved the Bible True—No. 8

WITH BIBLE AND SPADE IN THE HOLY LAND

W L Emmerson

APART from Jericho, to which we have alluded in an earlier article, one of the most thoroughly explored mounds of southern Palestine is that of Tell el Duweir, the site of ancient Lachish, a border fortress guarding the Judean highlands from incursions from the coastal plain Sad to say, the leader of the expedition which worked here for many years, Mr J L Starkey, was murdered in 1938 by Arab brigands while he was returning to the site after a visit to Jerusalem

On the lower slopes near the north-west corner of this city mound, a small Canaanite temple was found early in the excavations, belonging to the later half of the second millennium B C In and near it were discovered seven scarabs of Amenhotep III of Egypt (1413 1377 B C), one of which is definitely dated at about 1403 B C by the statement on it that up to Amenhotep's 'tenth year' he had killed "lions terrible 102"

The fact that these are the latest relics found in the temple, ties in with similar finds at Jericho, and supports the Bible account that Lachish fell during the southern campaign of Joshua around 1400 B C, when, of course, the temple would cease to be used for the idolatrous Canaanite worship (Joshua 10 31, 32)

Higher up the slopes of the Lachish mound, Dr Starkey found a great double wall of Hebrew masonry, twenty five feet high in places, and enclosing an area of some twenty two acres A sloping roadway was found running up the south west corner of the mound to two great gates, with massive flanking towers on either side, while within the city the foundations of an inner citadel with twelve foot walls of Hebrew masonry was uncovered

Solomon began the work of fortifying Lachish against the Philistines, but the greater part of the construction was probably done by Rehoboam, of whom it is recorded "Rehoboam dwelt in Jerusalem, and built cities for defence in Judah He built even Bethlehem, and Etom, and Lachish, and Azekah And he fortified the strongholds, and put captains in them, and store of victual, and of oil and wine" 2 Chron 11 5 11

Lachish was three times captured during the Hebrew period, once by Sennacherib and twice by Nebuchadnezzar, and all three disasters have left their records in the ruins

"In the fourteenth year of King Hezekiah,' Sennacherib came up against the fenced cities of Judah" and Lachish became his temporary headquarters during negotiations with the king in Jerusalem (2 Kings 18 13, 14) That the taking of Lachish was regarded as a great victory by the Assyrian king is evident from the great bas relief recording the event on the walls of his palace at Nineveh, and now on view in the Assyrian Gallery of the British Museum

On the roadway approaching the entrance gate of Lachish the excavators found a bronze helmet crest mount just like those in the Nineveh reliefs, and many arrowheads, pikes, and scale armour dropped during the Assyrian attack on the gates

While Sennacherib did not destroy Lachish, evidences that it was burned by Nebuchadnezzar were found in abundance by Dr Starkey "Large sections' of the wall "bear evidence of having been brought down by fire, the south west corner bearing the main brunt of the Babylonian attack," and two layers of charred strata underlie buildings of the Persian period all over the city area

A clay seal once attached to a sheet of papyrus was discovered with the impress of a signet ring bearing the words "For Gedaliah, he who is over the house" A person of this name was left in charge of the remnant of the Jews by Nebuchadnezzar after the deportation of Zedekiah and the nobles of the land (2 Kings 25 22, Jer 40 5, 6, 41 2)

The "Lachish Letters"

Most important of all the literary finds at Lachish, however, and indeed one of the most important discoveries ever made in Palestine—were a series of inscribed potsherds belonging to the period of the final overthrow of Lachish by Nebuchadnezzar, which have become famous as the Lachish Letters"

Unearthed in 1935 from among the charred remains of the guard room at the main gate of the city destroyed in the final burning of 588 B C, they comprise some eighteen pieces of pottery written upon with carbon ink in early Hebrew characters The messages reveal them to be military dispatches from a person called Hosaiah—a biblical name found in Jeremiah 42 1 and Nehemiah 12 32—to 'my lord Yaush," the military governor of Lachish, and penned a few weeks or perhaps only a few days before the destruction of the city by Nebuchadnezzar

The actual events recorded in the letters throw a vivid light upon the last days of the Hebrew monarchy Letter Four provided conclusive evidence that Tell el Duweir was the city of Lachish, a fact not certainly known when the excavation was begun

Letter Six complained of the words" of certain princes which were "not good" and which were 'weakening" and "slackening" the hands of the army officers Evidently these men had been impressed by the prophecies of Jeremiah, whose enemies declared, "he weakeneth the hands of the men of war" Jer 38 4

Professor Torczyner, the translator of the letters, believed he had found in Letter Three a glimpse of Urijah the prophet who also prophesied "according to all the words of Jeremiah" and in consequence of persecution had to fly to Egypt, but was brought back to die a martyr's death (Jer 26 20 23) This same letter refers to "Nedebiah, grandson of the king," who is named in 1 Chronicles 3 18 as one of Jehoiakim's grandchildren

Well, therefore, might Professor Torczyner write of the letters "Up till now we have got even out of our most fortunate excavations, only outside evidence concerning the contents of the Bible, reports written

mostly by Israel's enemies about wars, seiges, captures, and destructions. Now, for the first time, we have got in our letters real internal records written by the men themselves who wrote our Bible, concerning their religious thought and their sufferings within the last period of Judah's independent history, adding thus a most important chapter to our Bible"

ISRAEL'S CAPITAL UNCOVERED

In the northern kingdom, the most important excavation has been at Samaria, the capital of the ten-tribed kingdom of Israel, and here again most valuable confirmatory light has been thrown upon the Bible story, by the successive expeditions of Harvard University, the Field Museum of Chicago, and the Palestine Exploration Fund

The gate of the city was found low down on the north side of the mound, with masonry of the Hebrew monarchy period and also of Herodian times On the top of the mound the palaces of Omri and Ahab were identified, with additions by Jeroboam II. These are among the finest Israelite masonry known, and show evidences of intimate acquaintance with the palaces of Assyria and also with the architecture of Syria and Phœnicia, which is what one would expect in view of Israel's much closer contact than Judah with the nations to the north

At Samaria, as later at Lachish, a number of inscribed potsherds, or ostraka, were found written in ink in primitive Hebrew characters These date from some time prior to the capture of Samaria by Sargon, king of Assyria—possibly around the time of Jeroboam II The personal names on the Samaria ostraka, in contrast with those at Lachish, frequently include the name Baal, showing how much more rapidly the northern kingdom sank into idolatry than the mountain kingdom of Judah

Equally as important as the ostraka found by the Chicago expedition, was the discovery in Ahab's palace during the later British expedition, of a large number of fine ivory fragments carved with mythological figures of Egyptian, Syrian, Assyrian, and Babylonian origin, which once formed part of decorative panels on the palace furniture These recall the indictments of Amos against the nobles of Samaria reclining upon their "beds of ivory" (Amos 6 4) in their "houses of ivory" (Amos 3:15) and also the "ivory house" which Ahab built for himself (1 Kings 22 39)

Beneath the court of Ahab's palace was a subterranean chamber, perhaps an enlarged cave, which had evidently been used as a prison This may have been the actual dungeon into which Micaiah was thrown after his fearless prophecy of Ahab's doom (1 Kings 22 27)

The outlines of a large pool near the palaces is believed to be the Pool of Samaria, where the chariot of Ahab was washed out after the kings death (1 Kings 22 37, 38)

COMPLEMENTARY FINDS IN MESOPOTAMIA

While at times we may regret the paucity of material on Palestine sites substantiating the Bible story of the kingdoms of Judah and Israel, finds in Egypt and Mesopotamia have often come to our aid and filled in the historical details in a remarkable way

For example, the fact that "Ahab the Israelite" was on the throne just before the middle of the ninth century B C, is confirmed by the fact that Shalmaneser III mentions him as an important king on his "Monolith Inscription," now in the British Museum

At Khorsabad, about ten miles from Nineveh, Paolo Emilio Botta uncovered the palace of Sargon II (722-705 B C), the conqueror of Samaria according to the Bible, whose very existence the critics once doubted When his very substantial palace was found they had to beat a hasty retreat Later excavation of Sargon's palace uncovered wall reliefs and inscriptions which listed the capture of Samaria as the outstanding event of the first year of his reign

The building inscriptions of Nebuchadnezzar illuminate vividly that king's boastful attitude toward the city of Babylon as recorded by Daniel (Dan. 4 30) The cylinders of Nabonidus fill in the details of the last days of Babylon, and it was on them that the name of his son, Belshazzar, was first found, again to the discomfiture of the critics who had pronounced the Bible account of him entirely fictitious

Finally, the cylinder chronicles of Cyrus dovetail with Daniel's account of the fall of Babylon in a remarkable way One of Cyrus' cylinders found at Ur of the Chaldees tells how, after the capture of Babylon, this Persian king "returned the gods" captured in earlier times "to their shrines" This helps us to understand the deeply religious character of this man, who also declared, according to the Bible records: "The Lord God of heaven hath given me all the kingdoms of the earth, and He hath charged me to build Him an house at Jerusalem, which is in Judah Ezra 1 2, 2 Chron 36 22, 23

With the return of the Jews after the Assyrian and Babylonian captivities the Old Testament story ends and with it must close our present survey The story of archæology and the New Testament is another vast field upon which there is here no space to embark

But as we look back over the array of evidences which we have, as it were, been able to call forth from the dust of the ages, in confirmation of the absolute trustworthiness of the Bible record, there is surely none but will echo in mind and heart the fine words of Oliver Wendell Holmes

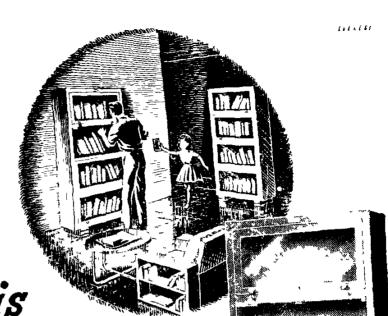
"I believe in the spade It has fed the tribes of mankind It has furnished them with coal, gold, iron, water And now it is giving them truth, the mines of which have never been open till our times"

THE PROBLEM OF SIN AND THE WAY OF SALVATION

(Continued from p 32)

setting aside "the perfect law" of God are now revealed before all created beings The history of sin and rebellion against God has now reached the end of its slimy trail and will never be forgotten The lesson of sin with its deadly consequences has been learned, not only by the redeemed of the earth but by the inhabitants of unfallen worlds "The whole family in heaven and earth" will join in ascribing praise to God

John the Revelator, in describing the final deliverance of God's saints, says "And every creature which is in heaven, and on the earth, and under the earth, and such as are in the sea, and all that are in them, heard I saying, Blessing, and honour, and glory, and power, be unto Him that sitteth upon the throne, and unto the Lamb forever and ever" Revelation 5 13

The entire universe has been cleansed from sin God Himself has solved the problem of evil

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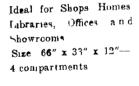
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SCIENTISTS ENSURE PURE FOOD FOR U S CONSUMERS

All kinds of food—even doughnuts—are inspected by chemists of the District of Columbia Health Department as part of an unceasing campaign to protect the publ[illegible] Since a complaint was made that mice had nibbled these doughnuts, the chemist is givin[illegible] them a microscopic examination

WORLD PROGRESSING TOWARD REALIZATION OF EISENHOWER'S ATOM FOR PEACE PLAN

Dr Arnold Sparrow of the U S Atomic Energy Commission's Brookhaven National Laboratory Upton New York places potatoes near a pipe centre in which radio active atoms that emit gamma rays will be placed The rays will be used to irradiate the potatoes in order to destroy the micro organizms in them that cause deterioration Dr Sparrow's research indicates that irradiated potatoes will stay sound and in excellent condition for as long as 18 months without refrigeration or other methods of preservation Scientists believe that the use of atomic radiation may develop into an important method of preserving fresh foods of all kinds without the need for refrigeration

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Everybody

October 1955

The Oriental Watchman and Herald of

HEALTH

46th YEAR OF PUBLICATION

Contents

October 1955

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Associate Editor

J B OLIVER, M D, D T M
Associate Editor

OUR COVER

Who knows the thoughts of a child?
—Nora Perry, from *Who Knows?*

Photo Chaturbhai P Patel

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Minute Meditations

BE THANKFUL FOR THE POLICE

D. A. Delafield

I HAVE found policemen to be, as a whole, a respectable class of men—alert, keen-minded, physically strong, and usually with character and intelligence above the average. They are among our finest citizens. Good-looking uniforms help to make them the symbols of law and order they are intended to be.

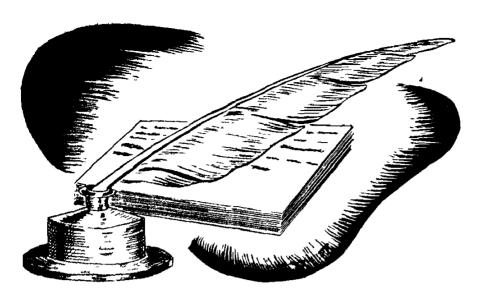
A feeling of civic pride and security comes over me when these officers of the law appear on the streets of our cities and highways.

We have all had enough experience with policemen to know that we can count on them for the kind of help no one else can give. For example, one night in the wee hours I was disturbed by two drunken men quarrelling in front of my home One of them cursed the other and struck him in the face, knocking him down. I lifted the telephone receiver and dialled the police Within five minutes the patrol car was on the scene handling the situation.

Yes, we should be thankful for the police. But this isn't enough. As citizens, we share responsibility with the police force for the well-being of society. It is our business to obey the law, and to teach our children that the policeman is their friend. It is the policeman's business not only to obey the law but to enforce it.

Public conduct is reflected in the conduct of the police department. Where the public is law abiding, demanding a circumspect police force and requiring serious law enforcement, such law enforcement is forthcoming.

City, State, and national police agents are the servants of the people, and they reflect the char-

(Continued on p 5)

THE EDITOR SAYS

I HAVE just been reading again the story of the little boy who *had* It is a beautiful story from the life of Jesus Let me share it with you

The great Galilean had sent His disciples into the cities, towns, villages and countryside of Palestine that they might be given some practical experience by personally teaching and healing as their Master had done The disciples met with varied experience They had experiences both thrilling and discouraging They had, in some cases, been able to do more than they had imagined to be possible, but in other instances, they had failed miserably Now, their field trip at an end, they returned to their Master weary but full of a great desire to counsel with their Teacher They yearned to learn from Him how they might do their work better and why they had not succeeded at times So the record states that Jesus told them to come with Him apart from the multitude and rest a while It was His purpose to give the disciples an opportunity to become refreshed after their strenuous activity and also to devote His time for this short period exclusively to His disciples and their problems

But, some of the people had seen Him as He crossed the lake and soon the multitude again sought Him and found Him in the wilderness The report states that there were five thousand men besides women and children in the crowd that sought to learn of Him in that isolated place And from the record, what He said must have been worth listening to, because the people apparently were so interested in what He was saying that they even forgot to be hungry

However, as the lengthening shadows of the evening came on, nature asserted itself and hunger was felt It was a long way to the nearest village and farther still to the homes from which those people came If Jesus dismissed them it would be many hours before the majority of the people could eat, and then only after having travelled many weary miles over the rough countryside

So it was that Jesus told the multitude to be seated in an orderly fashion He asked His disciples to find how much food there was available in the vast assembly The disciples went from group to group inquiring for food but everywhere they went they met with the same reply, "We have no food"

As they continued their seemingly hopeless search, they did find a lad who had food Yes, in that great multitude of probably ten thousand people who *had not* there was a boy who *had*

I suppose, though we are not told, that as he saw the people going past his home and learned that they sought to see Jesus he also desired to go along He begged permission from his father and pleaded with his mother He promised that he would be careful and assured his parents that he would be all right Finally they agreed and the joyous boy rushed about making his little preparations Just as he was leaving to join the great throng passing along the dust-choked road, his mother handed him a small parcel of food He had forgotten that he might get hungry, but mother love had remembered, and so it was that the boy *had*

It was a joyous trip There were new places to be seen, new faces and new friends among the other children, but most thrilling of all was the realization of his ambition to see and hear Jesus as He taught and healed the people So intensely interested was the lad in all that he saw and heard that when noon came he forgot all about his little parcel of food and it was only when the disciples made their search in the evening that he remembered the five small loaves and the two fishes his mother had hurriedly wrapped for him as he left the house As he remembered them he suddenly realized that he was ravenously hungry Then it was that Andrew, one of the great Teacher's disciples, came and spoke to him Hungry as he was he joyously gave all he had to the Master From that little, the multitude was fed and twelve baskets of fragments were gathered after all had eaten their fill

It was a wonderful demonstration of creative power on the part

(Continued on p 24)

LETTERS TO THE EDITOR

The representation of a mosque on your cover [August, 1955] is quite out of place vis-a-vis the two lines on page 3 of your magazine They are no better than a rhapsody To be most appropriate there should be a church on your cover to justify the two lines on page 3 Amongst others it has been the privilege of Christians that GOD appeared to them and so they fear Him It cannot be denied that Jesus did appear on the earth and He was crucified

Yours etc ,

(Signed) Syed Faiyazuddin

The Editor deeply regrets that the caption he selected to go with the picture on the cover of the August number has been misunderstood by at least one of our many subscribers It certainly was not our intention to cast any reflections upon any religious group Our sincere thanks are expressed to Syed Faiyazuddin for bringing this matter to our attention and again to him, and to any others who may have misunderstood our purpose, we extend our heart-felt apology

L J L

Be Thankful for the Police

(Continued from p 3)

acter of the public they serve Where there is wholesale lawlessness and corruption among the citizens, it is easy to see how this general immoral condition can seep into the very fabric of the agency dedicated to its suppression

There are a few bad policemen, but most police officers are loyal to their trust And don't forget, theirs is a dangerous business. They serve the public at the risk of their lives Let's not allow their morale to be broken by confused gossip It is for us as citizens to get behind the business of good government and show by our works that we will stand behind a vigorous law-enforcement programme This is as much a part of good living as attendance at religious services and prayers for peace.

WHAT'S IN THE NEWS?

When the human eye is at rest it normally is focused on subjects 20 feet or more away

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Viruses cannot live by themselves but often thrive in living tissue

* * * *

Eighty square miles in the Klip River Valley in South Africa have been devoted to a new wildlife reserve

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Eclipses of the sun or moon occur at least twice a year The maximum number that can occur in a given year is seven

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Trains in Mendoza Province Argentina, were recently delayed because of a grasshopper plague Workers had to clear the track and put sand on the rails

* * * *

Japan is situated with the ocean bed dropping sharply away from the islands Because of this, it is a veritable earthquake centre The people are said to live in constant dread of quakes, and never become accustomed to them in spite of their frequency

* * * *

By a new motion picture technique, both an X ray image and a conventional picture are produced on the same negative at the same instant The movie can show face and lip movements and facial expression and X ray images of speech organs, for example This method is expected to aid in some types of clinical research, especially that concerning speech mechanism where cleft palate correction may be involved The method was developed by Sydney Weinberg, Dr James Watson, Jr , and Dr George H Ramsey radiologists of the University of Rochester School of Medicine and Dentistry, who demonstrated it to the Radiological Society of North America

* * * *

Evaluation tests are under way with a new antibiotic, cycloserine, which shows promise of combating tuberculosis It abolished all traces of TB germs in some thirty seven severely ill patients The tests were conducted by Drs Israel Epstein, KG S Nair and Linn J Boyd of New York, who reported to the fourteenth Veterans Administration Army Navy conference on tuberculosis Trials on 200 patients are being carried out by the VA to learn just how effective the new antibiotic may be

* * * *

For some time blue jeans have been popular as school clothing among high school students, but many school administrators and parents have wanted to bring a halt to this trend Good news along this line recently came from George M Epstein, president of the National Association of Retail Clothiers and Furnishers He reported that opposition to blue jeans as school clothing "is becoming national in scope" "It is now recognized" he said "that there is a link between juvenile delinquency and sloppy dress habits which should make school authorities as well as parents anxious for a better level of dress"

* * * *

High blood pressure, reports Science News Letter, is three times as common among those who are overweight as among those who are not

* * * *

Scientists of Britain's Common Cold Research Institute have tried ten times to get Mrs Kathleen Chaffey to catch a cold So far they have been unsuccessful The 45 year old woman is considered a prize subject for experiments because somewhere in her physical make up is the secret of how not to catch a cold

THE SURGEON

WILFRED W EASTMAN, M D

THE green-tiled operating room was silent White figures stood over the table The surgeon, with scalpel in hand and a serious and tense look in his eyes, whispered through his mask, "Is the patient ready?"

The anæsthetist nodded

The surgeon made his cut into the abdomen Not in one sweep of the knife, but with skill, with care Each bleeder was caught and tied with a ligature Each structure was identified, and each layer of the abdomen was entered with caution Able assistants, in this case an intern and a family doctor, gave him the exposure he needed

"He has stones in his gall-bladder," the surgeon said as he delicately felt the organs within the patient's abdomen "Everything else seems to be clear"

"Good," said the family doctor "That's about what we concluded after seeing the X-rays"

"Well, he definitely needs his gall-bladder removed But wait, what is this I feel? A little stone has slipped down into the common bile duct, out of the gall-bladder We'll have to explore that also"

Two hours later the final stitches were taken in the patient's abdomen, and the doctors went to the locker room

"That was certainly a tough gall-bladder to get, Doc," the family doctor said. "I'm surely glad we had you here If you hadn't explored the common duct the patient would have developed jaundice, and we'd have been forced to operate again That's why it is always good to have you surgeons to consult in problems such as this"

"Thanks, Ed," the surgeon said "But you did the diagnosing I was glad to help in any way I could"

Then the two doctors left the locker room and went to the patient's room to tell the relatives that all was well

This is just one of many ways that doctors work together today for the common good of you—the patient

Modern surgery is truly an innovation It is a far cry from the kitchen-table surgery under coal-oil lamp with crude instruments and few facilities for caring for the patient afterward Today, thanks to modern anæsthesia, sterile techniques, new instruments, and brilliant ideas by continually progressing scientists, surgeons are able to explore almost every organ of the body—the abdomen, the heart, and now even the brain

> The surgeon often stands guard between you and death.

Surgery has become so specialized that you yet may be able to call on the certain kind of surgeon you need, such as a heart surgeon, lung surgeon, kidney surgeon, or brain surgeon The fields of plastic and chest surgery are still relatively new, and great advances can be expected in the coming years in them

Little more than ten years ago it was unheard of to operate on the human heart successfully Now it is an everyday procedure round the country for patients suffering from rheumatic heart disease to have their contracted heart valves opened This delicate procedure requires a specialized heart surgeon He opens the chest and makes a tiny hole in one side of the heart, just large enough for his finger Then with his finger in the heart as it beats away, he gently opens the valve and makes it normal size, allowing it to carry the normal amount of blood to the body Thus many a person doomed to an early death has been given extra years of life—because there is a heart surgeon on the medical team

Because the field of surgery is so specialized, it is no longer wise for a physician just out of medical school and internship to attempt to do major surgery and expect to be competent in this broad new field Legally, he can proceed with any surgery agreed upon by the patient in counsel with him But it is not in the best interest of the patient for him to operate until after he has developed skills in surgical techniques Although young doctors in outlying areas are doing heavy surgery of necessity, the great majority of surgeons today are qualified through long years of training beyond medical school and internship

If for example, your surgeon is certified by the American Board of Surgery, and therefore a certified specialist, he spent an additional four years in the hospital in residency training or three years in the hospital and two years with a qualified Board surgeon During those long and arduous years he often may have worked from sun-up until past midnight, attended conferences in X-ray and pathology, scrubbed for long hours in the operating room, and then made room rounds on his patients to make sure their post-operative condition was safe He seldom saw his wife and family An evening of entertainment was a rarity His life was devoted to but one t h i n g—*developing surgical* skill and judgment He mastered not only the techniques of doing the surgery but also the even more important skill of "when not to operate" *That is the most important* of all

Even after his period of training, the surgeon must keep abreast of modern advances surgically, keep up on his anatomy and pathology His time is devoted exclusively to the surgical arts and skills, whereas the general physician has not the time to carry on this work along with the many other demands on his time in the office, home, hospital, and community

Courtesy S D A Hospital Surat

The surgeon pauses for a word of prayer before beginning the operation He knows he is responsible for the life of his patient and needs God's help

No one realizes the need for a surgeon more than the up-to-date family doctor, who is the hub of the medical team He first sees the patient, knows him best, knows his family and surroundings He is most sensitive to any change in the patient's behaviour pattern, and can therefore most accurately judge the significance of these changes He knows whether the patient is prone to have pain at the slightest provocation or whether he has pain only when something definite is wrong

He must know the varied symptoms and evidences of the entire gamut of medical as well as surgical diseases and what methods of treatment are available to effect a cure

Of course the family physician is qualified and frequently prefers to perform many surgical procedures in the office and in the hospital Yet when he anticipates that his patient will require heavy surgery of the more specialized type, he calls for the medical team m e m b e r especially trained in surgery

For an example of this teamwork consider Mrs. Y's experience She has been under the care of her general physician for several weeks She has pain in her right upper abdomen This pain is aggravated by eating, and she has come to the place where she just doesn't eat She is losing weight weekly as a result Ordinary medications used as a test fail to relieve any of the symptoms more than temporarily

The doctor sends her to an X-ray specialist His and other's study demonstrates that the patient's blood count and hæmoglobin level are one half of normal, also that

(Continued on p 28.)

Why not live on the sunny side of the street? You will have more neighbours!

Keep Alive and Happy

ELIZABETH LARSSON, M.D

ETERNAL youth! The search for it is universal and time honoured Youth is wonderful, but none of us stays sweet sixteen more than one year In our pursuit of life, health and happiness, it is encouraging to note the progress made during the past fifty years in the control of disease

This improvement was accomplished by a marked decrease in infant deaths and the reduction of deaths from tuberculosis The discovery of insulin in 1922 has prolonged the life of the diabetic Pneumonia and other infectious-disease deaths have been brought to a minimum by the careful administration of antibiotics Nation-wide health education has made us aware that we can do much to protect our own health—that we are to a large degree the custodians of our health

A new car! We must take good care of it No one would deny the wisdom of that statement The usefulness of the car is prolonged by careful driving and tuning up the motor at regular intervals by a competent mechanic The car will also give us better service if we recognize and check any unusual sounds or changes in its performance

The same principle holds true in the upkeep of our health We all know this is true, but because our bodies are so efficient and adaptable and because the "motor" continues to run, we often neglect making repairs until permanent damage is done Our years of happiness and usefulness can be extended by careful living and moderation in our work, eating habits, and all activities

Just as we watch for the knocks in our automobiles, so we must learn to watch for the danger signals that may mean the development of disease Sometimes the signal may read "Caution" Again it may say "Stop" If all is well, we have the green "Go Ahead" signal

Let us take a closer look at some of these warnings Every good highway is well marked with such signs as "Slow Down," "Danger Ahead," and "Slippery When Wet" As we travel down the highway of life our bodies also post warning signs for us to note

Overweight? The caution signal is on The obese person is more subject to heart trouble and has more gall-stones and diabetes than the thin person Cancer of the uterus lining is more prevalent among overweight women Obesity is a hazard in pregnancy, to both the mother and child The stillbirth rate among obese women is nearly double the rate in women of normal weight The overweight person is a poor surgical risk because of a tendency to disorders of the heart and blood vessels

The remedy for overweight is not in reducing pills, fad diets, or exercise, but in changing eating habits Form proper eating habits while reducing, and continue these habits after you have attained the desired weight They will become second nature to you It is well to remember that our need for calories decreases about 7.5 per cent for each ten years after we are twenty-five

Any mar in the finish, any defect in the upholstery, any fault in vital functions of our cars receives immediate and expert attention! Any growth, any sore that does not heal, any change in the function of our bodies, is a stop signal It says, "Stop and investigate!" These signals are so important that each one deserves separate consideration

The human accelerator, the heart, is one of the most important organs of the body Pressure under

the breastbone and shortness of breath related to exertion are warning signals, and should be investigated

Give any lump, chronic ulcer, or thickening of the skin immediate attention Some of these abnormalities may require removal and examination under the microscope to determine whether the growth is harmless or cancerous This is usually the best way to determine whether a lump is malignant Moles and warts under certain circumstances or in certain areas of the body may require removal for microscopic examination

Report to the doctor any sore in the mouth that does not heal, persistent cough, hoarseness, or difficulty in swallowing Your physician will examine your mouth and throat, and may advise a chest X-ray examination

Twenty thousand lives are lost yearly in the United States of America from cancer of the breast In an attempt to reduce this alarming figure, the American Cancer Society and the National Cancer Institute have prepared a film "Breast Self-Examination" This film, available free through the American Cancer Society is an excellent method of teaching women how to examine their own breasts It should be seen by every woman in her club or other organization

Self-examination of the breasts consists of two parts

(1) Viewing before the mirror

(2) Examination with the flat of the fingers

The examination should be made at the end of the menstrual period, and continued as a monthly habit after the menopause See your doctor immediately if you feel a lump or thickening in your breasts The doctor may advise removal of the lump for microscopic examination by a pathologist

Give attention to persistent indigestion or any change in normal bowel habits Your doctor may advise X-ray examination of the stomach and intestines, an examination of the stool for blood

I P S
A glass figure of a woman clearly showing the construction of the body

Unusual discharge or bleeding from the pelvic organs or bladder may mean disease of the vagina uterus, ovaries, or urinary tract The physician can detect disease by examination If the findings of the examination, together with your symptoms, so indicate, he will advise that a smear be taken for detection of malignant cells, or he may advise that tissue be removed for microscopic examination

It has been found that women who have borne children are perhaps slightly more susceptible to cancer of the cervix (the mouth of the womb) than those who have not borne children. This can largely be prevented by examinations after the birth of the child, when existing ulcers are discovered and treated Future disorders can be controlled by annual or biennial examination of the pelvic organs

The woman who has not borne children should also have periodic pelvic examinations, for she too can develop these diseases It is indeed pathetic when women neglect such examinations until they have pain and bleeding between the menstrual periods This often means when cancer is present it is so far advanced that little can be done

We all want to keep the green go-ahead signal burning, so that progress on our journey through life will not be accompanied by delays, detours and expensive repairs Our best insurance is the periodic complete physical examination

One part of the medical examination is the history, or story, you give the doctor After you have told your physician of the symptoms you have noticed he may ask you questions They should be answered honestly and thoughtfully Your symptoms or complaints are important to the doctor in his efforts to help you The doctor's examination, plus any necessary laboratory tests, will reveal disease in the early and curable stage

There is a period in woman's life that deserves special mention It is the menopause At this time the ovaries decrease in size and produce fewer hormones This decrease results in cessation of menstruation, and in the effort of the body to adjust, many women experience what we call hot flashes The human thermostat seems to go out of order, and they feel warm one minute and chilly the

(Continued on p 24)

What to Do for the COMMON COLD

(Part II)

J WAYNE McFARLAND, M.D.

The best way to avoid a cold is to run away from it.

KNOWING how to prevent a cold is much better than knowing how to treat it after it has been contracted To keep away from a cold germ, you must run from it What does that mean? Just exactly that—run, at least step up your walking so that you really get some exercise from it You see, one of the factors in a slowed-up circulation can be corrected by regular systematic exercise In other words, if the blood circulates freely throughout the body for even a brief period of thirty to sixty minutes a day, the circulation is aided in keeping balanced For example, actual tests indicate that the blood circulation on the inside of the nose improves

Walking is one of the finest forms of exercise known Get out for thirty minutes a day and walk with a good brisk stride That is what is meant by running away from a cold You may actually walk away from it This rule is just as important to you as the one about rest

But there is another form of gymnastics that I am sure you will enjoy Once you try it out and see how it keeps your head clear from pesky cold germs, you'll not want to stop This treatment tried out in scientific experiments always benefits cold-sensitive and cold-susceptible persons It is not difficult It is the matter of doing it daily that counts in cold prevention every morning an alternate hot and cold shower before breakfast

The first time you may take the cold water only slightly cool, perhaps almost tepid Don't let this discourage you—simply change it from the warm or hot water to what you can comfortably stand of the cold water for the first, second, and even third mornings The success of this treatment is in the regularity and final contrast you will be able to stand between hot and cold water after several weeks of daily alternate hot and cold This is your procedure to follow

1 Have the bathroom warm enough for comfort.

2 Keep your hair dry by wearing a bath cap.

3 Start with a warm spray, and gradually turn it on hotter- 3 minutes of time for this procedure

4 Change to cold, or cool water (even tepid) to start with, for 5 to 10 seconds of time for this part of the treatment

5 Now turn on the hot water again for another 3 minutes This time you may find you can take it a bit warmer than when you started

6 Again cold water, or as cool as you can stand, for 5 to 10 seconds

7 Back again to the hot water for 3 more minutes

8 The last change is to the cold water, for 10 to 15 seconds

9 Dry thoroughly with a warm dry towel The more briskly you rub, the finer the reaction and the more benefit you will gain

You can enhance the effectiveness of the cold spray by brisk rub-

bing of the skin with a bath friction mitt or a rough washcloth Some persons can take a cold friction bath to the entire body by starting on just one body part and adding a part each day The cold friction bath, too, is a tonic par excellence, and it is classed right along with alternate hot and cold sprays Remember that you do not have to start with cold water right away Make some contrast of temperature between the hot and the cold spray, and before ten days are up you will be pleasantly surprised to see how much cold water you can stand

What will this do for that old runny nose of yours? It will help regulate your circulation Don't fear that bathing will let you catch cold Do it properly and *follow the directions,* and you will have Mr Cold Germ pleading for mercy

Here are some other benefits of these blood-vessel gymnastics Alternate hot and cold showers increase the number of germ-eating white blood cells, which circulate in the blood stream It also puts more red blood cells to work by mustering them out of their hiding places in lymph nodes and in the spleen This means that you have more red blood cells carrying oxygen and food to the millions of cells of all the body When you bring more red blood cells into action they increase body resistance not only to cold germs but to all kinds of germs

This form of alternate hot- and cold-water treatment is called hydrotherapy (hydro=water, therapy=treatment) But there is still another cold-prevention measure that uses water, another "water way" to health You should try it

This time it is two glasses of water, one just before your shower and one just after This gives you a bath inside and out You see, it aids the kidneys in their job of helping rid the body of wastes If you are no water drinker, then you should start with one-fourth cup of water, and each day drink a little more Two glasses of water for a stomach that has never known such goings on so early in the morning might overwhelm it But you can train it for what is good for you by going at it a bit slower

By the way, another four glasses of water during the day (between meals), and you have the quota needed to keep the human machinery from breaking down because of the lack of good pure water Did I hear someone say, "I'll do all this, doctor, when I get well, but what can I do now? I'm all stuffed up My throat is sore, and my nose feels as if someone had hit it with a baseball bat I'm miserable"

Let me ask you some questions Remember what happens to the secretions of the nose when you start to have a cold? Correct, they turn alkaline And when you lie down they start to return toward the normal acid side So, first thing, go to bed—get in the horizontal instead of the vertical

Another question Do you recall that moisture is needed to have good functioning of the cilia (the hairs inside the sinus)? All right, old-fashioned steam inhalation is one way to obtain moisture and heat If the doctor has given you some nose drops to open up the nasal passageway, use them just before taking fifteen to twenty minutes of steam inhalation If you like, place some oil of eucalyptus drops in the water Oil of eucalyptus is very soothing and aids in combating the throbbing pain that comes with a congested nose

We are sure you will have no trouble carrying out the next suggestion Heat always aids circulation And heat to the sinuses will also help restore the normal acid reaction of the nasal secretions This treatment can be done by the use of hot moist packs placed directly over the bridge of the nose Washclothes wrung from hot water may be used They must be changed frequently, and so are not as efficient as regular fomentation cloths, which have been described frequently in the HERALD OF

(Continued on p 24)

FATIGUE

LESTER H. LONERGAN, M.D

Tiredness is a signal from your body that it needs a good night's sleep.

OF ALL the warnings nature gives us to foretell danger to the body, one of the prominent and most significant to us is the common symptom of fatigue Yet how many are the artificial means we use to counteract fatigue while actually further depressing rather than renewing our supplies of nervous energy

What does fatigue mean to us? Why does it occur? and what can we do about it to build for buoyant health?

To most people fatigue means simply weariness from over-work, but it has a greater significance to us than that We usually think of it as a temporary feeling of tiredness associated with less than usual muscular strength, loss of interest and ambition, but a condition completely overcome by a short period of rest

Fatigue may be either physical or mental Let us consider what happens when a muscle works Whenever a muscle contracts and does hard work, lactic acid is produced This acid may be considered a fatigue poison, since it is one of the causes of fatigue When lactic acid accumulates, the muscle has less and less strength for work, until finally it becomes completely exhausted However, if from the tired muscle the lactic acid is removed, it quickly recovers its ability to work

In our bodies, besides this lactic acid, there are still other fatigue-producing substances formed when work is done, notably the fatigue toxins that arise from the destruction of protoplasm As these are formed they are carried by the blood throughout the body, producing fatigue not only in the muscle that did the work but also everywhere else, especially in the brain

If fatigue, then, is partly a chemical change in our bodies, that should be quite easily demonstrated by a transfusion of fresh blood In one instance a dog was made to work until it was exhausted and fell asleep When its blood was transfused into the body of a fresh animal, the second animal also became immediately tired and fell asleep

When blood from a wide-awake dog was transfused into one sleeping from fatigue the latter woke up and became alert

So we may think of fatigue as partly a kind of blood poisoning with lactic acid and toxins. But of course that is not the entire story As with every change in our body fatigue is not only a chemical but also a biologic process

It is a fundamental law of life that all activity must be followed by a period of inactivity or rest During the rest time our energy reserves are restored to normal, our "storage battery" is re-charged and the body is thus prepared for further activity

The normal feeling of tiredness after a period of work is only temporary, readily relieved by a short period of rest Efficiency is restored However, if the person persists in over-work, his energy reserves finally become depleted He falls into a state of chronic fatigue which markedly lowers his resistance against disease

As a rule, the day's work should not be prolonged into the evening If we work efficiently all the hours of the day, the work extended into the evening is so much extra, and the over-taxed body suffers from the burden Those who work extended hours often lose much more than they gain Their energies are exhausted and they work on nervous excitement They may not realize their immediate injury, but are surely undermining their constitution

Make it a health rule not to labour to the point of exhaustion, thereby disqualifying yourself for future effort Do not try to crowd into one day the work of two

R Krishnan

If you have feelings of fatigue on the slighest exertion, see your physician for this is the way that nature endeavours to foretell danger to the body

We recognize temporary fatigue after work as a normal regulator of life's activities, but when does fatigue become a real danger signal?

When a person recognizes his inability to bounce back from his weariness to buoyant energy with a brief rest period, when fatigue becomes excessive on only moderate exertion, or when it becomes chronic—never entirely overcome—real study should be given to the possible cause This may be any one of a dozen poor health habits, entirely aside from the easily apparent one of overwork For instance, lack of regular exercise or poor posture may be responsible Inadequate nutrition is one of the commonest causes Unsuitable working conditions or a type of work totally unsuited and disagreeable to the worker is another cause Perhaps an undesirable environment in off-work hours is the fault This may be in the nature of poor family relationships or lack of proper recreational activities Whatever the cause, it must be discovered and remedied before any permanent relief can be expected

You may ask, "If adequate rest and sleep are so vital in maintaining health reserves, and sleep may be difficult to obtain, what about sleeping pills to promote quiet rest?"

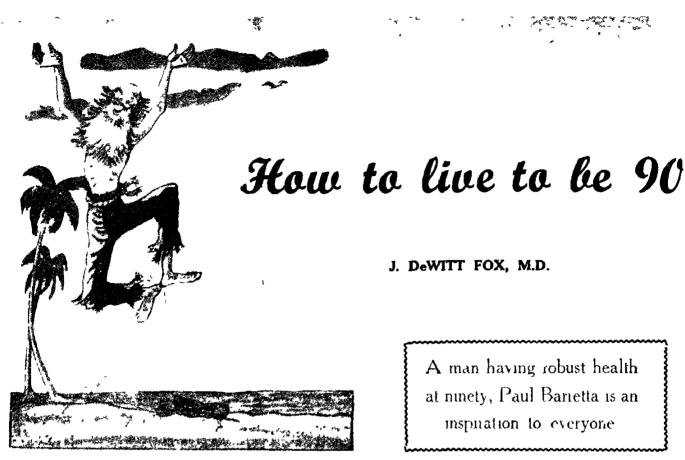
Sleeping pills may be successful in putting a person to sleep, but such a "drug sleep" does not at all imply that the same benefit is gained as from natural sleep Natural sleep involves a building up of the entire nervous system from a depressed state of fatigue to a condition of abounding strength It involves a re-charging of our battery, a renewal of our energy reserves But when a sleeping pill is taken, it depresses the nervous system, and may continue to act next morning, producing a further depression of spirits and

confusion of mind The hang-over commonly experienced the morning after a drugged sleep (headache, confusion, mental depression and disinclination to work) is pretty good evidence that there is a big difference between natural, refreshing sleep and sleep produced by depressant drugs

There are many different drugs commonly used to overcome fatigue But do any of them really restore our reserves of energy as do natural rest and sleep?

No drugs are known that can accomplish the restoration nature provides in a balanced programme of rest and exercise Even though there is produced a temporary increase in activity from such artificial stimulation, it is always followed by a secondary depression One of the stimulants that years ago was much used in tonic mixtures was strychnine in small doses Even today it is occasionally employed for the purpose There is no question about the stimulation resulting after a couple of days of its use But just as surely as this artificial exhilaration is experienced, just as surely will the

(Continued on p 20)

How to live to be 90

J. DeWITT FOX, M.D.

A man having robust health at ninety, Paul Barretta is an inspiration to everyone

PAUL BARRETTA, of Trenton, New Jersey, was ninety years young in February of this year Born in Palermo, Italy, as a youth he worked on the farms of the Italian hillsides Later he moved to Africa to care for vineyards there. In 1900 he immigrated to the United States, settling in New Jersey He worked for many years as a construction worker on the Reading Railroad, returing in 1927.

In an interview we learned some of Mr. Barretta's secrets of a long and happy life These we gladly pass along to anyone interested in living to the ripe old age of ninety and still being able to carry a hundred-pound sack on his back, do heavy construction work, and enjoy life to the fullest degree with robust health One hears so often the saying, "Well, I surely don't want to live to be ninety if I have to be a burden or an invalid " But no one would mind being as well preserved and sturdy of mind and body at ninety as Mr Barretta

"My philosophy of life, I'm sure, helps to keep me young," says Mr Barretta "Don't worry about the troubles that strike today, because tomorrow will be a better day." His relentless faith in the future is anchored in a deep religious faith He feels that there is nothing so important as deep-down faith in God and His eternal watchfulness over us

A believer in good things to eat, Mr Barretta has always been fond of fresh fruits and vegetables and his native olive oil used as dressings on salads and as shortening or flavouring in cooked dishes Green vegetables are among his favourite foods He uses no heavy spices He

does not eat meat of any kind He drinks milk liberally and enjoys cereals For the past ten years he has been without teeth, but still manages to enjoy his meals, in spite of the fact that he will let no dentist fit him with dentures His habits are of moderation and temperance He does not smoke or drink, even though his native Italy is known for its many wines Of recent years his daily meals have been divided into four or five small meals rather than three heavy ones

Mr Barretta's day begins at 5 A M, when he arises and strikes out for a brisk one-hour walk On returning, he has a good breakfast of milk, cereal, and fruit juice He does not drink coffee or tea In mid-morning, after browsing through the newspaper, he takes a more leisurely stroll around his Trenton, New Jersey, neighbourhood

His son, Michael Barretta, with whom he lives, has a hard time keeping the old gentleman quiet, for he has always been active and a hard worker One day on his morning stroll he came to a housing development where construction work was in progress. Later the son missed his father Upon looking about the neighbourhood, he spied him carrying two-by-fours into the house for a carpenter and helping the builders on the housing development He even was given a job on one construction project

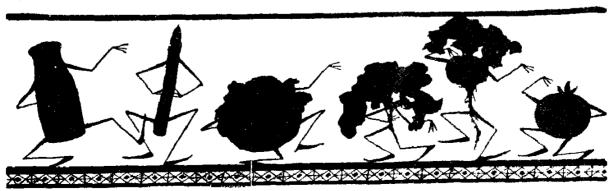
Vitally interested in world events, Mr Barretta keeps up with the news broadcasts and the changing world scene

In the early afternoon he enjoys napping or basking in the sun And he has a love of the out-of-doors He likes to sit on a park bench and chat with passers-by, and will always reiterate his belief that "hard work never hurt anyone, only worry" He exemplified his belief, for he has always worked hard out of doors but rested easy at home in the evening

A sound and relaxed sleeper, he retires about 7 P M "The first few hours of sleep in the evening are the most valuable," he says "That's why I try to get to bed an hour or two before nine each night I am sure the folks who sit up till past midnight don't realize how much damage they do to their health They cut their sleep short and crowd their minds with emotional tension and excitement Then when they do retire they can't sleep soundly Only a deep, relaxed sleep, with the muscles genuinely tired from hard work, is a refreshing sleep," Mr Barretta says

Though this dawn-to-dusk daily life would be hard for most people who pack an eighteen-hour day of tension and turmoil into their routine, Mr Barretta comments, "Perhaps that is why so many folks today are having heart attacks at fifty and peptic ulcers at thirty"

Although it might appear that Mr Barretta's life now is slow and easygoing, he has worked hard and long to rear a fine family His wife died five years ago, at eighty He sired three fine sons—Samuel Barretta, an engineer in the Bureau of Ships of the U S Navy, Washington, D C, Michael, a wood-worker at Roebling Company, Trenton, New Jersey, and Charles, a toolmaker in Nutley, New Jersey

Although Mr Barretta is aware that he has lived two decades beyond his allotted threescore and ten, he still has faith in the future. "If today is tough," he says, "tomorrow will be easier If we make a mistake today, tomorrow will be another chance to do better" This seems to be the secret of his long, relaxed, and fruitful life—"Tomorrow will be a better day!"

THE PACE OF PROHIBITION

KRISHNA KUMAR GUPTA, M.S., LL.B.

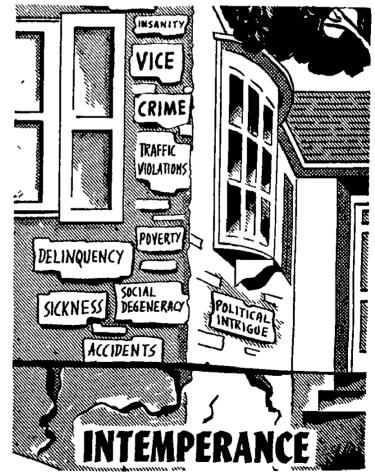
INDIA lags behind other countries of the world in the matter of public health This, *inter alia*, is due to the bane of drinking or, negatively speaking, want of prohibition total prohibition—in our midst

Congress is pledged to prohibition but the pace of progress of prohibition has not been commensurate with the requirements of the situation

Madras was the first State the pioneer in the field In Assam, there is total prohibition of opium except for medicinal purposes in the non-hill districts The policy is one of restricting consumption of country spirit by imposition of various controls from time to time with a view to preparing the ground for total prohibition in due course Bihar is stepping towards prohibition gradually Madhya Pradesh rations liquors on permits in certain districts and *taluks* Only five districts know prohibition in Mysore, Rohtak has it in the Punjab and Travancore-Cochin has it in thirteen out of its thirty-six *taluks* As far as Uttar Pradesh is concerned, only eleven districts and three pilgrimages are dry at the moment

The darker side of the picture is more revealing On the last republic day alone in the capital 326 gallons of wine were consumed Of this amount 54 gallons were country-made The total gave an income of six thousand rupees to the State The Union Home Minister Pandit Pant rightly said at a civic reception that there are too many cocktail parties in Delhi, that Delhi is not only wet but too wet and efforts must be made to make it dry An over-all picture of the metropolis of India is also had from the fact that in 1954 one crore eighty-seven lakhs worth of spirit were consumed as against one crore sixty-five lakhs worth in 1953 And the national drink bill comes to 150 crores a year All this is at once disquieting

In Uttar Pradesh the demand is for total prohibition Government, however, are not introducing it because of the impending loss in revenue Loss of lakhs on this head is gain of crores in national health The talk of loss of revenue again is a confusion of words It is equivalent to saying that we sacrifice what we would get by decoying wage earners and deceiving their wives and children

The anti-prohibitionists' arguments have lost their foundation No one can contend now that prohibition interferes with personal liberty It is not even a socio-political fad It is an enormously beneficial reform It improves the economic condition of the masses beyond recognition In the words of Pandit Nehru, "Indulgence in alcohol is a social abuse which should be discouraged as our population benefits by prohibition in

Courtesy ALERT

many ways, for instance, financially, physically and ethically"

On the one hand, Congress is pledged to prohibition and, on the other, there is no date fixed for total prohibition These are two inconsistent propositions A policy of gradual prohibition too should have a target date As a matter of fact, as Union Deputy Minister Abid Ali said, "Prohibition must be introduced in the entire country at one time"

The Defence Minister, Dr Katju, replying to a question in Parliament, said some time ago that Government only suggest and request soldiers to desist from drinking What is sauce for the goose should be sauce for the gander To keep the army in good trim, drink is certainly not a necessity

Of late there have been a number of air accidents That they are less than in foreign countries is no consolation to us That the pilots are not supposed to drink within twelve hours of duty does not also satisfy us The logic is simple, it demands that the possibility of stupor bringing about these mishaps must be avoided

The problem of illicit distillation is a menace only so long as the pace of prohibition is slow and so long as total prohibition has not been introduced

Of course, there is the question of employment of the toddy workers But it is not a big problem The importance of their employment should not be exaggerated Alternative employment can surely be found for them.

A recent news item states that the party in power in Ceylon has decided to enforce prohibition We take it, it does so for the ostensible advantages prohibition affords If, therefore, Ceylon even merely thinks of prohibition, there is reason we implement it without delay.

On July 4, at a reception held at the U S Embassy in Delhi to celebrate the American Independence Day, no liquor was served Ambassador Cooper thus set a good example before other embassies, legations and consulates in India Indians will do well to thank him for his foresight

In regard to an All-India policy, the Planning Commission appointed a committee to look into the matter of prohibition In its interim report, total prohibition is suggested for introduction by April 1, 1958, the States to begin work in this direction by April 1, 1956 The report is being studied by the Planning Commission It may be possible that we can have prohibition by the middle of the second Five Year Plan

Our Five Year Plan envisages an expenditure of a hundred crores on public health The cost of enforcement of prohibition, seven lakhs or whatever it be, can, in this light, be easily borne by the said provision in the Plan

For enforcement of prohibition in Delhi, an enquiry body of three members has been working for sometime We are glad it has overcome the obstacle in its way and has brought out a report in tune with the times and in keeping with the expectations of the public leading to this happy day

National health is of the greatest importance A healthy nation alone can be a bulwark against adversity and external onslaughts There is, at the same time, no gainsaying the fact that prohibition connotes a development scheme So let us propagate the creed of prohibition, accelerate its pace and make our nation a healthy and wealthy one

New Life through Prohibition

Courtesy ALERT

MIGRAINE

LESTER H. LONERGAN, M.D.

ONE out of every twenty persons suffers from sick headaches, or migraine. All too often the attitude toward the distressing affliction is resignation, since it is commonly believed that little can be done in treatment. Actually much can be done to relieve these periodic attacks of splitting headache.

You may think that the problem of headache is relatively simple. Every patient with this illness can tell the doctor what his difficulty is. Then why not order some pain-relieving mixture and send him on his way rejoicing?

There is far more to medical science than simply relief of distressing symptoms. Of course the victim of this disease knows all too well that he has a splitting headache, and he demands results right now. But far more important than immediate relief of this symptom is the discovery of its cause.

Disease never comes without a cause. The way is prepared and disease is invited by disregard of the laws of health. We all wish to know what are and what are not violations of the laws of health. By correct living we all want to place ourselves in better condition. We know we cannot disregard the principles of health by our habits of eating, drinking, dressing, and working, and be in health. Our transgression of nature's laws produces the sure result of disease.

God gave us a certain amount of vital force. Also He has formed us with organs suited to maintain the various functions of life, and He designs that these organs shall work together in harmony. If we carefully preserve the life force, and keep the delicate mechanism of the body in order, the result is health. But if the vital force is too rapidly exhausted, the nervous system borrows power from its resources of strength. And when one organ is injured, all are afflicted. Nature bears much abuse without apparent resistance. She then arouses and makes a determined effort to remove the effects of the ill-treatment she has suffered. Disease is an effort of nature to free the system from conditions that result from a violation of the laws of health.

There are certain factors so often associated with migraine as to suggest a cause-and-effect relationship. Yet these are very diverse, and it is generally agreed that no single cause is responsible for all cases. One of the most important of these causes is heredity. Practically all patients with migraine tell us of similar attacks in other members of the family, on the mother's side in most instances. In fact, if the parents had migraines, about half the children will develop this same malady. Of those who do, four fifths of the children inherit it from the mother, and one fifth from the father.

> You may be resigned to your "sick headache," but actually much can be done to relieve it.

That some glandular imbalance may be partly responsible is indicated by the fact that these periodic headaches in women often disappear during pregnancy or after the change of life has made its appearance.

Another cause often observed, but perhaps only contributory, is the character of the diet. Foods that are most likely to precipitate in susceptible persons are fish, oysters, and clams. Excess sweets, especially chocolate, are likely to do the same thing.

It has been repeatedly observed that although migraine may appear in persons in all social strata and in all walks of life, it is far more frequent among the "thinkers" than among the "doers." In other words, the white collar and professional groups have far more than their proportion of migraine.

It is safe to say that victims of migraine tend to be of a certain psychologic type. As Dr. Russell N. DeJong describes them, "they are apt to be tense, nervous, worrisome, overly conscientious persons who work hard but fatigue easily. They are above the average in intelligence. They are often sensitive to criticism and react strongly to all stimuli. The woman who is subject to migraine is apt to be a meticulous, fastidious housewife—extremely neat, careful, orderly,

and efficient. The man subject to sick headache is often over-ambitious and exacting, with an exaggerated sense of responsibility and perfectionistic attitude toward himself and everyone else Both may be persons who take on many additional responsibilities They are people who get things done, so that they are always relied on for jobs that no one else will take They take life seriously and feel responsibility keenly

"In people of this type, any change from normal may bring on an attack Overwork, fatigue, loss of sleep, worry, hurry, anger, frustration, or excitement may be important contributing factors An unexpected guest, an additional responsibility, a problem that at the time seems insoluble—these, too, may be the cause of a severe headache"

There is only one body change that apparently occurs regularly with each attack of recurring headache, and that is a relaxation of the walls of some of the larger arteries in the neck and in the tissues covering the brain You can readily understand that as these, blood vessels relax and widen, the blood will go pounding

Migraine head-ache is generally caused by faulty habits of living and your physician will be able to help you to discover how best to adopt healthful practices that would keep away these distressing attacks

through them with greater force than usual This apparently stimulates certain nerves, and results in the characteristic headache of migraine Just why these arteries distend to produce such a pain, we do not know

Just what are the features that differentiate this from ordinary types of head pain? Migraine is a type of headache that recurs periodically in persons otherwise enjoying good health In most patients, it is irregular in its appearance, with no definite interval of time between attacks Although it may start at any age, more than half the cases develop in early adult life, between the ages of twenty and thirty The immediate attack is usually associated with disturbance of vision, which may take any one of a variety of forms, frequently described as dancing spots, blurring lights, or simply blind spots in the field of vision At the same time there will be observed a marked increase in sensitivity to light, excessive secretion of tears, and sometimes pain in the eye The other most frequently associated symptom is an upset stomach Just before the actual attack the patient often experiences for several hours a vague feeling of mental or physical depression

The symptoms that precede the actual attack—the warning signals—are usually the same for any particular case Besides the depression already mentioned, there may be a period of irritability or nervousness, drowsiness for several hours, marked fatigue, or utter exhaustion Whenever the person recognizes his warning signal, he knows that his headache is soon to develop

The question is whether there is

any effective method known to relieve these attacks

We can confidently state that for the vast majority of these sufferers, (well over three fourths of them) methods of treatment are now available that bring welcome relief One of the most effective treatment methods is the inhalation of pure oxygen The results are striking, the headache being relieved or greatly modified usually within twenty minutes to an hour In one series of twenty-five cases of migraine treated with oxygen inhalation, nearly ninety per cent of the patients experienced complete relief Although this procedure is commonly limited to hospitals where the proper equipment is available such treatment can readily be carried out in the home At nominal cost a suitable tank and oxygen mask that allows the patient to talk or read can be obtained It is well for us to remember however that this does not cure in the sense of preventing subsequent attacks It only relieves the immediate attack

Narcotics should be strictly avoided in such a chronic illness as migraine because of the danger of developing addiction to their use A drug that has been extensively prescribed for migraine neither a sedative nor a narcotic but which apparently relieves the distress by narrowing the widened arteries is a preparation of ergot known as ergotamine tartrate As with most potent drugs this one used indiscriminately is dangerous It should never be used by persons with hardening of the arteries or certain other diseases of the blood vessels because of the very real danger of its producing gangrene Aspirin although commonly used, may make the patient even more uncomfortable because of the excessive perspiration

A helpful home measure that often brings considerable relief is rest in bed in a quiet, darkened room This markedly lessens the throbbing at the height of the attack Another simple but quite effective procedure is the application of cold compresses to the forehead and back of the neck

These treatment methods are only for the relief of the acute attack The more important part of the treatment is directed toward the total elimination of the attacks or an attempt to cut down on their frequency

This direct attack again emphasizes the importance of preventive medicine, and reminds us that in the treatment of migraine, one of the main duties of the physician is to ferret out and bring to light whatever habits of life (so-called trigger mechanisms) may be responsible for the acute attack

Many persons with migraine have already proved to their own satisfaction that the more even and smooth the tenor of life, the freer they are from attacks This is especially true in regard to regularity of sleeping hours and meals and avoidance of fatigue

Outdoor exercise, too pays off well All excesses in eating and drinking all over-indulgence—those physical strains that decrease health reserves—are to be strictly avoided Strong emotional responses to trying situations, which are frequently responsible for the attack, must likewise be avoided

The natural remedies, those we most often overlook, are by far the most important "Pure air, sunlight, abstemiousness, rest, exercise, proper diet, the use of water, trust in divine power—these are the true remedies"

FATIGUE

(Continued from p 13)

secondary depression follow

Far more frequently today do we depend on another drug, caffeine, for the artificial nerve stimulation it produces Regardless of how caffeine is taken, whether in tablets, coffee, tea or cola drinks its effects are the same It is a whip to a tired system After temporary stimulation, there is the inevitable depression The all-too-common practice of indulging in such stimulants as a "pick-me-up," merely to relieve fatigue when rest is needed, constitutes simply a method of borrowing on health reserves Such a practice cannot continue without a real price being paid—too often physical bankruptcy The "pick-me-up" is followed by a "let-me-down," and that not infrequently is followed by a crash

Most people who use these stimulating beverages are not aware of this secondary depressing effect That is possibly because it is masked by another dose of the stimulant drug But let the one who is accustomed to his regular caffeine beverage go without it for a day, and the harmful effects will be more apparent The studies of K Horst and his associates demonstrate that this after-depression follows the early stimulation produced by caffeine, and may continue for twenty-four hours after the use of the drug Another after-effect frequently produced by caffeine beverages is headache Undoubtedly most people who experience this will argue that coffee relieves the headache, actually it is the cause of it

When the tissues of the body become accustomed to a drug because of continued use, it sometimes happens that the regular work of the

various organs is interfered with unless a certain concentration of this drug is constantly supplied When the drug is withdrawn, disagreeable symptoms develop that are spoken of as drug-withdrawal symptoms This is especially true with morphine With caffeine it is true to a less extent The studies of Drs Driesbach and Pfeiffer demonstrated that in the case of caffeine beverages the usual headache experienced is actually a drug-withdrawal symptom In more than half of the trials in twenty-two persons, these investigators produced a typical headache by the sudden withdrawal of caffeine They described it as central in location, sometimes at the back of the neck, usually beginning in early afternoon, throbbing in type, and increasing in severity for four or five hours Along with the headache the subjects also complained of mental depression, disinclination to work and drowsiness

Does this mean that these stimulating caffeine beverages are habit forming?

Let Dr Oliver T Osborne professor of therapeutics at Yale University, answer that

"While caffeine is perhaps the best cerebral and mental stimulant we possess, and inhibits mental fatigue, and allows longer continued work, it of course cannot take the place of cerebral rest caused by sleep Consequently, while it stimulates it leaves the brain more fatigued after its action is over *When it is used repeatedly* as a cerebral stimulant and to prevent sleep, when it is necessary for a person to be awake, it can do nothing but cause general nerve *and brain fatigue, unless adequate* sleep is obtained

"There is no question but that a caffeine habit can be acquired, whether as such, perhaps in the form of [a cola drink] or as a tea or coffee habit [Cola beverage], tea, and coffee 'fiends' are of common occurrence

"Civilized man in this age is over-stimulated, and needs something to soothe and quiet him He (and also she) is beginning to get that quieting from more tobacco than he (or she) ever before used But if this does not satisfy him, he will drink more tea and coffee The result is greater nervous tension, greater nervous irritability, less sleep, more indigestion, and finally a loss of mental balance and of physical strength We are now menaced with the probable over-use of tea and coffee, hence this warning is issued

"The coffee, tea, [cola beverage], or other caffeine habits may be readily acquired by anyone, and may do as much harm, in some cases, as alcohol and tobacco "

These drugs simply force the nervous system to lie That very result was emphasized by Dr David Starr Jordan, former president of Leland Stanford University, in these words

"The basis of intemperance is *the effort to secure through drugs* the feeling of happiness when happiness does not exist Men destroy their nervous system for the tingling pleasure they feel as its *structures are torn apart There are* many drugs which cause this pleasure, and in proportion to the delight they seem to give is the real mischief they work

"Pain is the warning to the brain that something is wrong in the organ in which the pain is felt Sometimes that which should be felt as pain is interpreted as pleasure Of this character is the effect of all nerve exciting drugs As a drop of water is of the nature of the sea, so in its degree is the effect of alcohol, opium, tobacco, cocaine, kola, tea, or coffee of the nature of mania They give a feeling of pleasure or rest, when rest or pleasure does not exist This feeling arises from injury to the nerves which the brain does not truthfully interpret

"Some phase of mental unsoundness is the natural effect of any of those drugs called stimulants or narcotics Alcohol gives a feeling of warmth or vigour or exhilaration when the real warmth or vigour or exhilaration does not exist Tobacco gives a feeling of rest which is not restfulness The use of opium seems to intensify the imagination, giving its clumsy wings a wondrous power of flight

Coffee and tea, like alcohol, enable one to borrow from his future store of force for present purposes And none of these make any provisions for paying back the loan

"One and all, these various drugs tend to give the impression of a power, or a pleasure, or an activity, which we do not possess One and all, their function is to force the nervous system to lie One and all, the result of their habitual use is to render the nervous system incapable of ever telling the truth One and all, their supposed pleasures are followed by a *reaction of subjective pains* as spurious and as unreal as the pleasures which they follow

"Each of them, if used to excess, brings in time insanity, incapacity *and death With each of them the* first use makes the second easier To yield to temptation, makes it easier to yield again The weakening effect in the will is greater than *the injury to the body* "

When you remember that the body is the only medium through which the mind and the soul are developed for the upbuilding of character, you will stop and consider whether you are willing to subject yourself to any weakening substance

HOMEMAKERS' HELPS

RECIPES

Stuffed Egg-Plant

One good-sized egg-plant; 1 tablespoonful minced onion; 2 tablespoonfuls butter; 2 tablespoonfuls cream; salt to taste; celery salt to taste; sage to taste; bread crumbs.

Cut off top third of egg plant Scoop out the centre of the egg plant both top and bottom, leaving ½ inch shell Boil pulp in just enough water to keep from burning Drain, mash and mix with minced onion, butter, cream, salt and seasonings Add sufficient bread crumbs to take up moisture Stuff in hollowed egg plant shell, sprinkle with bread crumbs and bake in moderate oven 20 minutes

Egg-Plant Roast—1

One pound egg-plant; 1 egg; 1 cup milk; 1 teaspoonful marmite; 1 tablespoonful sage; salt to taste; bread (crumbled), ¼ cup oil.

Peel and boil egg plant (preferably in pressure cooker with almost no water) Mix together egg plant and egg Add bread to thicken somewhat Pour into greased baking pan and bake ½ hour in moderate oven

Egg-Plant Cutlets

One egg-plant; 1 onion; 1 cup cooked rice; 1 cup crushed walnuts; ¼ cup thick tomato sauce; 2 eggs; salt; flour.

Boil egg plant and onion in a very small amount of water Drain and mash Add rice, walnuts, tomato sauce, eggs and salt If necessary add a little flour Drop into frying pan by spoonfuls to make round cutlets

Egg-Plant Patties

One egg-plant; 2 eggs; 1 small onion; 1 green pepper; 1 cup bread crumbs; salt, sage to taste.

Dice egg plant and cook in small amount of water Mash Add beaten eggs, diced onion, green pepper and seasonings Add bread crumbs, mould into patties and fry golden brown on both sides

Egg-Plant Roast—2

One egg-plant, diced, 3 tablespoonfuls butter; 3 tablespoonfuls flour, 2 cups cooked tomatoes or 3 large tomatoes; 1 green pepper, diced; 1 onion, diced; 1 teaspoonful salt; 1 tablespoonful brown sugar, bay leaf, cloves.

Cook egg plant 10 minutes in salted water Drain and place in greased baking dish Melt butter, blend in flour, then add chopped vegetables and seasonings to butter and flour mixture, cook 5 minutes Pour over egg plant Cover with bread crumbs, dot with butter or cheese Bake in a moderate oven for 30 minutes

Egg-Plant Souffle

One medium egg-plant; 2 tablespoonfuls butter; 2 tablespoonfuls flour; 1 cup milk; ½ cup grated cheese; 2 teaspoonfuls minced onion; ¾ cup soft bread crumbs; 1 tablespoonful tomato sauce; 1 teaspoonful salt; 2 eggs, beaten separately.

Pare egg plant and cut in small pieces Cook covered in a small amount of unsalted water until tender drain and mash. Melt butter and blend in flour Gradually add milk stirring constantly until smooth and thickened Remove from heat, blend in cheese until melted; mix in egg plant, onion, bread crumbs, tomato sauce, salt and yolks Fold in whites Turn into greased 2 quart baking dish Place in pan of hot water and bake at 350°F 50 to 60 minutes or until brown and firm

Okra Salad

Select small okra in perfect condition Wash carefully but do not cut Boil until tender in well-salted water Drain, chill and serve with salad dressing like asparagus

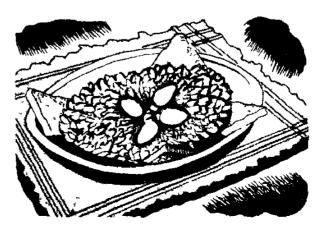
Summer Fruit Salad

One pint canned grape fruit, 1 pint canned white seedless grapes; 2 oranges; 1 medium papaya.

White seedless grapes and grape fruit sections are easily canned in season without sugar by the water bath method Combine, along with their liquid, with fruits in season and chill Serve with a garnish of whipped cream

Macaroni Salad

Eight ounces macaroni; 4 hard-boiled eggs; 1 minced onion, minced radish, cucumber, parsley or lettuce if in season; ½ cup cream, whipped; celery seed, salt, ½ recipe cooked salad dressing

Cook macaroni in rapidly boiling salted water until tender Drain and rinse with cold water to prevent sticking Add eggs and seasonings Whip cream, fold in salad dressing, pour over salad and mix carefully Chill

KIDDIES' KORNER

ROBERT'S MISTAKE

Arthur S. Maxwell

"DO LET me go down to the river, Mother," said Robert "All the boys are going today"

"Not today, dear, I'm sorry," said Mother. "You know how ill you have been"

"Yes, I know, but I'm well now"

"Not quite, but if you are very careful you will be all right next week"

"Oh, do let me go!" coaxed Robert

"I wouldn't mind your just walking down there if I were sure you wouldn't bathe," said Mother, anxious to please the boy as far as possible

"Oh, that's all right," said Robert "You needn't worry about that I won't bathe till next week"

"Then on that condition you may go"

"Oh, thank you!" shouted Robert, as he bounded out of the house and ran down the lane toward the river

The tide was up and the river was full Bright sunshine beat down on the calm waters An old sailing boat tugged gently at its moorings as the tide moved lazily by It was a scene to stir any boy's heart

"Hurrah! Here's old Robert again!" cried a group of boys who were in the water and obviously enjoying themselves to the full "Come on Robert! It's just grand Get your things off!"

"Sorry, fellows, but I can't bathe today I haven't brought my bathing suit."

"I'll lend you mine," cried the cheery little voice of Teddy Brown "I'm just coming out anyway I've been soaking in this pool all day"

"Afraid I can't," said Robert "Mother said I musn't"

"Oh, Mummie's darling!" sang a voice from the river, and all the other boys took it up

Poor Robert's face turned red, and he began to feel more and more unconfortable

"I'll come in next week," he said, "but not now"

"You're afraid!" said someone

"He can't swim!" said another

"He thinks we'll duck him!" said a third

Robert's determination began to waver After all, he felt quite well Why shouldn't he have just a little dip The water was warm He could go in for just a few minutes and come out again That would at least show the boys that he was not a coward And how would Mother know anything about it anyway?

He began to take off his coat

"Hip-hip-hooray!" shouted the boys "Good old Robert! Let's give him a splash!"

It did not take Robert more than a minute to get out of his clothes and into Teddy Brown's bathing suit, wet and clammy as it was

But once in the water he did not feel quite so happy as he had expected to be Neither did he feel so well And when the boys had finished splashing him, he was pretty tired He thought he would have a little swim out into the river before going out But he had not gone far before he felt sharp pains in his legs It was the dreaded cramp.

"Help!" he cried In a moment half a dozen boys were swimming toward him They soon dragged him back to the landing place and rubbed his legs until he was able to stand up again Then they all helped him on with his clothes

"I shouldn't have gone in," he said, "I've been ill"

"Why didn't you say so?" said Teddy "We wouldn't have teased you if we'd known Now we'd better see you home"

"No, don't," said Robert, a new fear entering his heart "I'll go by myself"

Mother was out when he reached home, so he slunk in at the back door and up to bed.

"Hello!" said Mother in surprise as she came into his room on her return "In bed again! I thought you were having a nice stroll down by the river"

"I was," said Robert, "but-er-I got sick and thought I had better come home And as you were out, I thought bed was the best place"

"That's too bad," said Mother "I thought we had got you almost well again"

"Let me feel your head," she said "You look feverish again."

Mother placed her hand on Robert's forehead—and the secret was out

"Robert!"

Robert understood

"Robert, your hair is wet"

"I'm sorry, Mother"

"Why did you do it?"

"The boys said I was a coward not to go in"

"A coward! Don't you think you were a bigger coward for giving way to them?"

"I know, but I thought you wouldn't hear about it"

"But, Robert, don't you remember the Bible says, 'Be sure your sin will find you out'?"

"Yes," said Robert, "and it has found me out this time again."

"And it always will," said Mother

Of course the doctor had to come back, and he said that poor Robert must stay in bed another two weeks He was dreadfully disappointed, but at least it gave him time to think over what had happened, and to resolve never to disobey Mother again

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THE EDITOR SAYS

(Continued from p 4)

of Jesus, but it was the willingness of the lad to share nay— to *give* his all that made it possible for the Galilean to exercise His power But we are not discussing miracles so much as those factors which make miracles possible today, even as they made miracles possible in the years gone by

In the first place, there was a lad who *had* something In the record we have referred to above, he had loaves and fishes It might as well have been ability or love or any other good character quality that might be named

In the second place, he had a mother and father who cared They cared enough for the lad to provide him with that which he needed That morning they gave him the loaves and the fishes, but in the days and months and years that had gone before they had given him something far more important than physical food They had given him a training and an education in the home which had developed his nature to the place where he could provide the necessary raw materials, so to speak, with which the Master teacher could work The lad knew that his little packet of food was not even enough to satisfy his own hunger but he was willing to share —to give He had been helped to develop a kindly, unselfish nature He had been trained to be thoughtful of others and gladly gave what he could of the resources that he had in order that the multitude might be helped

Fathers and mothers today are moulding and influencing the developing natures and characters of their children If these little ones are trained and educated aright, they too will have the raw material, the resources with which miracles can be performed

Parents, are your children being given a heritage such as this lad had? What sort of an example do you set before that son or daughter of yours? Are you giving your children only the loaves and fishes, or are you giving stalwart character as well? Are you day by day educating them to think only of self or are you so training them that they think first of others and themselves last? Are you training them to share - to give their all that the multitude may be blessed through them? What sort of an example do you set before them in your own conduct and attitude?

May it be said also of our children that there is a little one "here who *has*" May we earnestly help them to have those characteristics and qualities as were possessed by the lad whose five loaves and two small fishes were blessed for the feeding of the multitude

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WHAT TO DO FOR THE COMMON COLD

(Continued from p 11)

HEALTH Be sure that the treatment lasts for twenty to thirty minutes, and change the packs, or fomentations, on the face as soon as the heat is comfortably warm Hot moist packs can be used every two to three hours, and are one of the most helpful of simple home treatments Finish off with a quick cold rub

In addition, a good hot foot-tub bath two or three times a day will aid in restoring balance in the circulation After a hot foot-tub bath finish with an alcohol rub, and go straight to bed

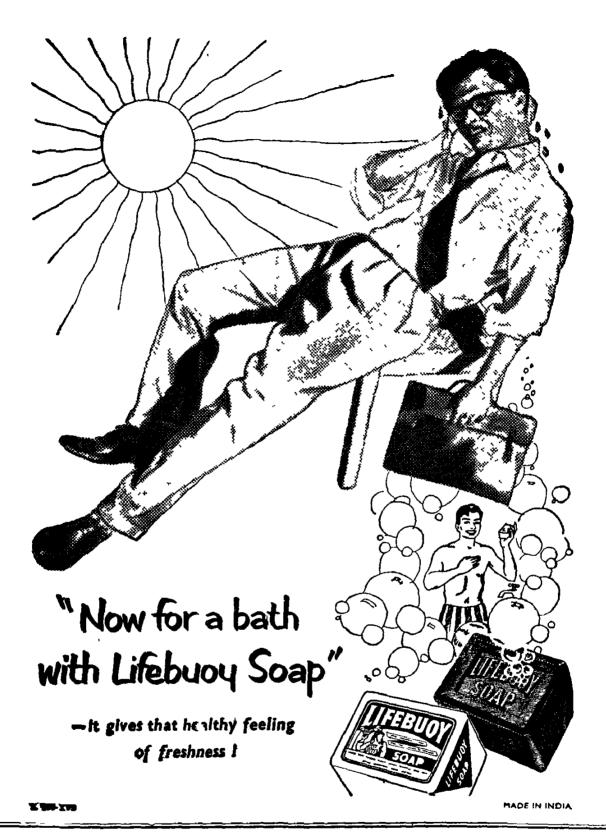
If your throat is sore, a hot salt gargle (a teaspoonful of salt to a pint of water) is just the thing Here again it is the heat that counts Sometimes in severe throat infection hot salt irrigations to the throat are given every hour To enhance the hot salt gargle, apply a heating compress to the neck This is done by wringing a piece of flannel or cotton from cold water, applying it to the neck, then immediately covering with a dry woollen cloth The woollen cloth must fit snugly about the neck and must cover well the edges of the wet piece of flannel It is kept in place by safety pins When a heating compress is in place on the neck, stay in bed well covered Do not allow any chilling of the body during the treatment This is most important

When the heating compress is r e m o v e d (after about 12-24 hours) the neck should be briskly rubbed with a rough washcloth wrung from cold water Dry the neck, and you will notice a marked reddening of the skin This rosy colour is a sign of a good reaction and a well-placed heating compress

These simple suggestions, along with what your family physician orders, are sure to aid you in throwing off a head cold And then may I add—why not start building up your resistance to live above colds?

KEEP ALIVE AND HAPPY

(Continued from p 9)

next The hot flashes can usually be ignored during the day when the women are occupied, but if the discomforts repeatedly cause wakefulness at night, they should consult a physician. Upon examination he will prescribe either a mild sedative or hormone tablets that will give relief until the system becomes accustomed to the lower hormone level It is not advisable

to take these medications any longer than necessary

Is the prevailing custom of concealing our age wholesome? We find that the pretense of youthfulness is too difficult to maintain when we reach fifty

In my native country of Sweden we celebrate our fiftieth birthday with joy, man or woman Early in the morning friends come to serenade, and we hold open house all day.

Life is really what we make it Every day has its ups and downs, and whether we enjoy life depends on our attitude, whether positive or negative Don't get the habit of seeing all the bad in everything We can just as easily make ourselves and others happier by looking for the good Our early years have their advantages, but so have our later ones If we relate our-

selves to life with maturity of mind and thought, we will find that the later years have more advantages than disadvantages.

In order to enjoy life, health, and happiness, let us remember

I am the custodian of my health.

The longer the belt line the shorter the life line

Watch for the *danger signals*

Periodic health examinations pay

Life truly begins at forty

1 This question and answer service is free only to regular subscribers

2 No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases

3 All questions must be addressed to *The Doctor Says* Correspondence personally with the doctor is not available through this service

4 Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES Answers cannot be expected under ONE MONTH

5 Questions sent in on Post Cards will not receive attention

6 Make questions short and to the point Type them or write them very clearly

7 Questions and answers will be published only if they are of such a nature as to be of general interest and without objection but no names will be published Address "The Doctor Says," Oriental Watchman and Herald of Health P O Box 35 Poona 1

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RHEUMATOID ARTHRITIS Ques—"I am thirty-one I got married in 1950 Previous to the marriage I had no trouble in my right knee Getting up after sitting down for some time seems difficult now and when I get up there is pain in the knee joint And at the same time pain shows up in the thigh and hip too There is no swelling either in the toes or legs or feet A little later, further symptoms developed There was no fever or chill but the limbs mentioned here do not function smoothly The legs and the feet go cramp as in convulsions particularly the left calf This happens suddenly and is felt all the time I was advised Vitamin B_{12} injection and on taking it the swelling in the knee decreased in size but the knee does not function as usual. The calf was affected in the same manner and there is pain in the thigh one time, the next minute the same pain is felt in the end of the toes and then in the calf muscles and so on Though I do not have to exert myself to do anything, all the same there is the much tired feeling, and my body shakes violently when I do anything I do not have blood pressure A number of specialists have treated me with B_{12}, Calcium, Calcium Bonate, Irgopyron, Calsoid tablets, etc, and made Wasserman Blood test (result—negative) and gave B Toxin, Gold injections, ESA Novalogan injections without results Kindly send in your advice"

Ans—From your symptoms, I would infer that you are suffering from Rheumatoid Arthritis This is the type of Arthritis that may result in chronic invalidism Treatment has not been too satisfactory until the recent discovery of the wonder drugs, Cortisone and ACTH When these are given, the symptoms usually disappear, but re occur when the medication is stopped These therapeutic products are very expensive and they must be given under the careful control of a well-qualified physician It is possible that if given in excess of the need, damage can be done to the body As these drugs are too expensive for the average person, we prescribe Aspirin, two or more tablets after each meal and at bed time, Ascorbic Acid 50 mg three times a day and some good Multiple Vitamin Supplement The joints can be treated by the use of heat in the form of an electric light bulb held as close to the joint as possible without burning, or hot fomentations, hot water bottle, etc Methyl Salicylate may be rubbed on the joints which helps some We also like to give Cod Liver Oil one teaspoonful twice a day

You should be sure that there are no existing foci of infection

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GOUT Ques—"What can be done for gout? Can you suggest any medicine or diet that would help? My age is 37 and my back is always paining and there is a sprain in my hip"

Ans—Gout can be controlled by careful diet Flesh foods, tea, coffee, and alcoholic liquors should not be used Aspirin is of considerable benefit You should take two tablets after each meal and at bed-time Colchicine 1/120 of a grain every one or two hours until the attack subsides or until toxic symptoms occur is of benefit. This drug should be given even during the night, awakening the patient if necessary It is, however, dangerous and should be given only under the supervision of a well-qualified physician There should be an abundant fluid intake and the patient should stay in bed until the attack subsides Are you sure you have gout or are you suffering from some form of arthritis? Gout usually attacks the great toe

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SNORING Ques—"What remedy is there so I may not snore during my sleep? I had an operation in my nose recently and this has not helped I used to move around during my sleep and I do not move in my sleep at the present time Those who observe me remark that at times I do not breathe at all for about five minutes Would I ever sleep without snoring? Kindly advise me"

Ans—When sleeping on your side or on your stomach you will not snore *Snoring is a result of relaxation* of the soft palate of the posterior portion of the roof of the mouth Train yourself to sleep in other ways than on the back You might tie a towel around your waist with a huge knot at the back, which should make sleeping on the back uncomfortable

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BALDNESS Ques—"Why are some people bald-headed? Is mental strain a cause for people to go bald headed as told by some?"

Ans—Most people are bald-headed because their ancestors have been bald headed Others are bald as a result of some severe fever Baldness due to certain diseases manifests itself in patchy areas It is thought that more men are bald than women because men cut their hair short When the hair is long and is brushed and combed daily, the root area is stimulated and is in a more healthful condition As a result, there is not the tendency to baldness It is also suggested that male hormones have a tendency to produce baldness Tight head-gear, which is more usually worn by men than women, constricts the blood vessels of the scalp and favours baldness Mental strain does not seem to be a factor despite the old adage which says, "As grass never

grows on a busy street, so hair will not grow on the scalp covering an active brain."

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TINGLING TEETH: Ques —"My wife's teeth have an unpleasant tingling to any food substance, and also when she does not eat. They fall one after another without giving her any real pain at all I am surprised at this She used cholorophyl tooth paste for cleaning her teeth What should I do?"

Ans —It seems that the nerves in the pulp of the teeth of your wife are somewhat exposed as a result of wearing away of the enamel and cavities, so that food, etc, irritate them. It has been established that the excessive use of sweets favours early tooth decay Soft drinks are also very harmful Sweets should be eaten only at meal time and the mouth should be washed out thoroughly after eating, because the bacteria that destroy the teeth multiply very rapidly if there is anything containing sugar remaining about the base of the teeth I would advise you to see a competent dentist

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VALUE OF GAMES Ques —"I mention here a few games such as hockey, football and tennis Which of these will help me to get the fullest benefit of exercise?"

Ans —Hockey, football, and tennis all give one a considerable amount of exercise However, for the ordinary person, tennis is probably the most satisfactory because it takes only two to play and the game is not as dangerous physically as hockey or football and it provides a very high degree of well rounded exercise to most parts of the body

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FACIAL BLEMISHES Ques — I am eighteen years old There are blemishes on my face There were pimples previously They are gone but these blemishes do not disappear despite my best efforts to get rid of these What can be done?"

Ans —Blemishes on the face resulting from pimples, if not too deep, can be removed by sand paper surgery This should be done by a well qualified surgeon The patient is anæsthetised and sterile sand paper under aseptic conditions, is rubbed over the skin until blood appears Medicated dressings are applied, and as the skin grows back, it usually is free of the blemishes

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ARM SUCKING Ques —'My son is about eight years old and he is in the habit of sucking his arm at the time of sleeping and keeps sucking till he gets to sleep If removed after he is asleep, when he awakes he again puts it in his mouth This is only at the time of sleeping In the morning when he wakes up, he sucks his hand till he gets up from the bed He is a fine intelligent child and normally keeps good health Can you suggest something by which he can stop himself or be stopped from this habit?"

Ans —I would suggest that you pay little or no attention to the habit your son has of sucking the arm If you break him of this, he will choose some other outlet, which is just as bad Do not reproach him or make him self conscious Pay no attention to it Give him an abundance of loving care and attention He will stop this habit himself one of these days

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POOR STATURE Ques —"My chest is 26"-27" I am thin and weak I am not suffering from any known disease However, at the age of twenty, I look as a boy of ten years Kindly let me have your advice as to how I can be just the same physically as other boys of my age"

Ans —At your age, it may not be possible to add to your physique Exercises can build up muscle and thus increase your weight and improve your physical structure Such exercises should be regular and of such a nature as will produce perspiration Various gymnastics and deep breathing exercises should be used.

"EGG WHITE" FROM WHEAT

What bakers, candymakers, and housewives have long desired—a substitute for egg white—has been discovered by Dr Eugene S Sagi, a physician engaged in research on protein chemistry He, with Dr Jules Pless, discovered in 1933 that the germinal part of the carob bean contains a protein complex almost identical to the gluten of wheat Their studies on carob gluten resulted in the manufacture of monosodium glutamate, now widely used to impart zest in cooking It has the uncanny power of bringing out the flavour

Further studies by Dr Sagi on one of the two fractions of gluten —gliadin—show it can be beaten into a foam that is a good substitute for egg white When a little starch is added, the whip is as stiff as egg white

Bakers and candymakers are beginning to use this gluten as substitute for egg white in filling and icing cakes and other desserts Candymakers who need a very stiff hot whip combine the gliadin with egg white

For persons allergic to eggs this new whip serves as a fine substitute garnish for desserts

FAT MICE GET CANCER

Mice fattened by the injection of gold have been found to acquire cancer twice as readily as normal mice, it was announced by Dr Samuel H Waxler, and Pelagia Tabar of Stanford University, Palo Alto, California

It seems that the fat, not the

gold, causes the increase in cancer development The gold caused the mice to develop ravenous appetites, and thus they developed thick layers of fat They gained two to three times their normal weight

Among the gold-fat mice, 64 per cent of the males between the ages of 1 year and 16 months developed cancer of the liver, compared to 28 per cent of the mice not receiving gold

This is in keeping with what doctors know about cancer in human beings, for it is well known that persons who are overweight run about an 11 per cent greater chance of developing cancer than those of normal weight

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ENJOY EVERY MINUTE

LOUISE PRICE BELL

THE wise mother has a happy time with her baby She realizes that babyhood at best is fleeting and so squeezes the maximum of fun and joy from her associations with her child

Mealtime for baby need not be a dull, boring time It can be a jolly happy time, with mother and her small son or daughter chatting as she prepares the food and serves it in the high chair

All too soon these small tots are grown up and ready to leave the home nest Make sure that you enjoy every minute with your little son or daughter

This is the time too when important health habits so vital to good health in later life are established Remember when you are preparing the pureed carrots smooth custard, or healthful milk drinks that your job is an important one Just as the mason lays the foundation for a strong building the town will be proud of just so the young mother lays the foundation for a future citizen the country will be proud of

No task is more soul satisfying than that of training and guiding children wisely and well to have fine, strong spiritual and physical lives

WHEN NEED IS DIRE

DOROTHY P ALBAUGH

He comes to her when need is dire—
When he has lost his favourite toy
When head is bumped or small legs tire
Yet since he is a little boy,
Confused and hurt, he cannot find
The words for what he has in mind,
His plea is inarticulate
But looking at him she will know,
Because she loves him, how to rate
His danger and outwit the foe
Thus when we turn to God will He
Respect the stumbling urgency
Of an appeal that never could
Except by love, be understood

THE SURGEON

(Continued from p 7)

the gall-bladder fails to function properly

The physician concludes that something serious is wrong with Mrs Y, even though he has not obtained a specific diagnosis He calls for consultation with a qualified surgeon, and goes over the case with him Both agree that there is present a potentially dangerous condition, requiring the only remaining method of investigation surgery They lay the evidence before the patient, and she agrees to the proposed surgery

Upon opening the abdomen the surgeon does not see the trouble immediately, but because of the previous findings, he is persistent in his search for it Finally he discovers a small growth inside the small intestine He sends a piece of this to be examined immediately It is found to be cancerous He proceeds with an operation he knows to be the only possible method of curing this condition

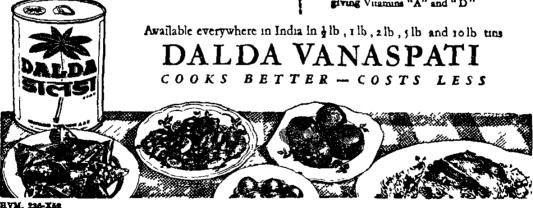
Even after the actual operation, much is left for the surgeon to do His long training has prepared him to watch for and cope with all the complications that may occur during the early post-operative period For example, since the patient cannot eat for several days she must be fed through the veins or in some other way The surgeon must often have much specific and detailed knowledge to maintain the patient's intake of calories and liquids

As the patient improves, the family physician gradually takes over her treatment again When she leaves the hospital, he is fully acquainted with what she needs

The patient lives a normal life for years after this experience with the medical team, possibly for the rest of her allotted three-score years and ten

A surgeon often hears complaints about the cost of operations When the patient analyzes the cost he recognizes that a great part of the bill comes from the hospital charges These charges represent board, room, nursing care, and medicines, and are easily understood when compared with similar expenses even when he is living at home They are particularly reasonable when compared with charges made for board and room alone at almost any hotel Fifteen years ago a simple hernia required three weeks of bed rest in the hospital, compared to about five days now Even in gall-bladder surgery the patient can often be up and out of the hospital in ten days or less

The surgeon's own fee diminishes in size rapidly when you stop to consider the time and tremendous expense involved in getting the skill that you have every reason to expect The value to you of life-saving surgery is beyond compare

Yes, there is a place for the surgeon on the medical team That's just where he belongs—on the team It takes the team to produce the high standard of results available to you

SUN HARNESSED FOR COOKING

(Continued from p 2)

patterns in countries of the Near East and India Concurrent with the scientific development of the cooker, therefore, the social, psychological and economic effects of introducing and integrating such a new device into the customs of the peoples will be determined

Also important, and another area of the study, is an industrial and material survey of these countries What materials are available for incorporation into the sun stove? What skills are available for its manufacture? What is the country's industry potential for its mass production?

Cost is a crucial factor in introducing solar cooking to underdeveloped areas The most success-

ful solar cooker developed to date involves a costly parabolic reflector.

Dr. Telkes' stove design eliminates the need for parabolic reflectors. Furthermore it has the advantage of retaining cooking heat for an hour or so after the sun has gone down, the time when the evening meal is cooked For another thing, its heat-storing feature largely eliminates the necessity of changing the position of the stove frequently to catch direct sunshine

Her stove is a closely insulated box, roughly triangular in shape Four ordinary flat mirrors fan out from the titled face of the stove At the rear of the stove is a removable drawer through which the food is placed. The mirrors reflect sunlight down through the titled face of the stove, concentrating it in the interior, which is filled with special heat-absorbing chemicals

Principle of the stove is "heat of fusion," or "heat of transformation" All materials when melting require large amounts of heat to change from solid to liquid forms During melting, the temperature of the material does not change but remains at the melting point The problem in the solar stove and other heat storage devices is to devise materials with relatively high heats of fusion In the sun stove, therefore, the sun's heat produces a succession of changes in the heat-storage salts, from solid to liquid state The changes give off the heat used for cooking

Preliminary models of Dr Telkes' stove have developed temperatures up to 300 degrees Fahrenheit on days when outdoor temperature was under 70 degrees Fahrenheit From 250 to 300 degrees Fahrenheit is considered ample for average cooking operations. Higher temperatures needed for frying and browning have been developed in the stove on clear days The areas for which the stove is intended enjoy direct sunlight most of the year.

The New York University research group believes their stove can be developed so that it can be manufactured to sell for five dollars This is the maximum sales cost estimated by the Government of India and the British Committee for Solar Energy Utilisation There is a potential need for 100,000,000 solar cookers in India alone

The least expensive solar cooker devised to date sells for about sixteen dollars Besides cost and conformity to local cooking custom, the New York University stove will be designed to meet these requirements durability, ease of operation and cleaning; simplicity and portability, ability to operate in early evening, and little attention required during cooking. The solar stove is an outgrowth of Dr Telkes' many years of pioneering in the solar energy field. (In more than 20 years of research Dr Telkes has become one of the world's leading experts in her field She has developed several useful methods for capturing solar energy and harnessing it to serve human needs. In 1949, as a research associate at Massachusetts Institute of Technology, she designed a sun-heated house in Dover, Massachusetts)

Many attempts to develop solar cookers have been made in the past one hundred years Mouchot in France and Adams in India built solar stoves around 1870, but their devices did not become popular The Smithsonian Institution in Washington, D C, had exhibited a solar cooking device designed by Dr C G Abbot in 1925

A cooker being manufactured on a limited scale was designed by Dr M L Chai in the National Physical Laboratory, New Delhi This employs a parabolic reflector and while it is suitable for boiling, it is not adaptable to baking

The New York University project is employing trained personnel from the areas where the solar cooker may be introduced The first of these is Fatolah Sotoodeh a graduate mechanical engineer from the University of Teheran who is currently a candidate for doctor of engineering science in New York University's College of Engineering

It is anticipated that some assistance may be obtained from the University of Teheran, the American University of Beirut, the Near East Foundation and appropriate United Nations agencies

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The Miracle of Healing

"Do You Want Your Health Restored?"

HERMAN F DE'ATH

WHEN long standing sickness disappears suddenly, we regard its disappearance as a miracle When healing is gradual, we incline to take recovery for granted The truth is, all healing is miraculous, whether it has taken a long or a short time The reason gradual healing does not surprise us is that we are more familiar with it than we are with sudden recovery from illness

That healing of body or mind is usually gradual seems wisely ordered If instantaneous healing were the rule instead of the exception, the balance of nature would be upset, there would be no place for human co operation and human discipline Sickness is permitted because it is a means of discipline, and happy is the man or woman who discerns and profits by the discipline it brings

The New Testament records the story of a man who had been a help less cripple for thirty eight years Each day he was conveyed by friends to a certain pool which, when it was mysteriously disturbed, was supposed to possess healing virtues After thirty eight years of affliction, this man naturally must have sunk into something near despair

One day, as the Nazarene Healer passed the pool, where clustered the halt, maimed, and blind, His gaze rested on this particular wreck of a man, and His compassion was aroused He stopped, looked at him, and according to Moffatt's translation, asked earnestly, " 'Do you want your health restored?' The invalid replied, Sir, I have nobody to put me into the bath, when the water is disturbed, and while I am getting down myself, someone else gets in before me' " (John 5:6, 7)

This reply seemed to satisfy Jesus that the man's will as well as his body had through long years of helpless inactivity, ceased to function Swiftly and with authority came the command " 'Get up, lift your mat, and walk' And instantly the man got well, lifted his mat, and started to walk " (Verse 9)

Somehow energizing power was communicated to the man's will, faith enabled him to spring into action, and the miracle happened

As we read on in this story, another fact emerges This man's long standing affliction was largely the outcome of vicious living "Later

Wherever the Healer of Nazareth went, He brought health and happiness to the people Today He is ever willing to extend the same blessings to humanity

on Jesus met him in the temple, and said to him, See, you are well and strong, commit no more sins, lest something worse befalls you'" (Verse 14.)

The Healer of Nazareth was careful to warn the man that though divine power had freely and graciously healed him, he must not fritter away his renewed health by a repetition of his old life. Only as he trod the path of wholesome, upright living could he expect to maintain his hold on the precious gift of health, so graciously restored to him. Having been freed from the just penalty of breaking the laws of health, he would suffer heavier penalties if he should drop back into his old ways.

Whether healing comes suddenly or gradually, health can be maintained only as we obey the laws of our being. We cannot with impunity flout the beneficent laws of the Creator which govern bodily health. If we indulge unnatural and harmful habits of living, the penalty will sooner or later descend upon us, and we shall lose that health and happiness which the Creator intended we should enjoy.

It is not given to most people to be healed by the immediate operation of divine power through an act of faith. For the most part men and women must battle day by day and year after year to keep in subjection unhealthful tendencies of body and mind. Many there are who can testify to the healing virtue which has come to them through patient and intelligent struggle with inherited and cultivated tendencies to health destroying habits of living.

Do we want health? Of course we do. But how much do we want it? That will be shown by the price we are prepared to pay. The fact is if we set ourselves to eat and drink, work and play, think and act, do everything in fact to the glory of God, only then shall we enter into that more abundant life which issues in health, happiness, and peace.

YOU AND THE BOOK

LIGHT IN A DARK PLACE

ALMA L. TIBBS

1. Isaiah 60:2. The world is filled with darkness, moral and spiritual.

"For behold the darkness shall cover the earth, and gross darkness the people: but the Lord shall arise upon thee, and His glory shall be seen upon thee."

2. Isaiah 9:2—Light has been provided.

"The people that walked in darkness have seen a great light: they that dwell in the land of the shadow of death, upon them hath the light shined."

3. John 12:46. Jesus declared Himself to be that light.

"I am come a light into the world, that whosoever believeth on Me should not abide in darkness."

4. John 8:12—Those who follow Him will not walk in darkness.

"Then spake Jesus again unto them, saying, I am the light of the world: he that followeth Me shall not walk in darkness, but shall have the light of life."

5. Exodus 10:22, 23—When Egypt was filled with darkness God's people had light.

"There was a thick darkness in all the land of Egypt three days: they saw not one another, neither rose any from his place for three days: but all the Children of Israel had light in their dwellings."

6. 1 Corinthians 10:1-4—The presence of Christ, the Light of the world, gave them light.

"Moreover, brethren, I would not that ye should be ignorant, how that all our fathers were under the cloud, and all passed through the sea; and were baptized unto Moses in the cloud and in the sea; and did all eat the same spiritual meat; and did all drink the same spiritual drink: for they drank of that spiritual Rock that followed them: and that Rock was Christ."

7. Exodus 27:20—In the tabernacle oil was used for light.

"And thou shalt command the Children of Israel, that they bring thee pure oil olive beaten for the light, to cause the lamp to burn always."

8. Exodus 30:25, 26, 30—Oil was also used to anoint the tabernacle and those who ministered in it.

"And thou shalt make it an oil of holy ointment, an ointment compound after the art of the apothecary: it shall be an holy anointing oil. And thou shalt anoint the tabernacle of the congregation therewith." "And thou shalt anoint Aaron and his sons, and consecrate them, that they may minister unto Me in the priest's office."

Note: Oil is a symbol of the Holy Spirit.

9. John 15:26—The Holy Spirit makes clear and effective the teachings of Christ.

"But when the Comforter is come, whom I will send unto you from the Father, even the Spirit of truth, which proceedeth from the Father, He shall testify of Me."

10. John 16:13—He is sent as guide to the followers of Jesus.

"Howbeit when He, the Spirit of truth, is come, He will guide you into all truth: for He shall not speak of Himself; but whatsoever He shall hear, that shall He speak: and He will show you things to come."

11. John 14:16—He was to remain forever with them—is still on earth.

"And I will pray the Father, and He shall give you another Comforter, that He may abide with you forever."

12. John 14:18—He is Christ's personal representative.

"I will not leave you comfortless: I will come to you."

13. Isaiah 58:7, 8, 10—We may find light by serving needy humanity.

"Is it not to deal thy bread to the hungry, and that thou bring the poor that are cast out to thy house? When thou seest the naked, that thou cover him; and that thou hide not thyself from thine own flesh? Then shall thy light break forth as the morning, and thine health shall spring forth speedily." "If thou draw out thy soul to the hungry, and satisfy the afflicted soul; then shall thy light rise in obscurity, and thy darkness be as the noonday."

14. James 2:8—One does well to deal thus with his fellowman.

"If ye fulfil the royal law according

(Continued on p. 34)

SPACE FLIGHT COMING !

Who Will Be the First Passengers?

RICHARD H UTT

"ENGINEERS could start construction this year of a rocket ship capable of zooming outward into space and reaching the moon, if some agency would finance the project The basic principles of a moon rocket are understood, no major problems remain unsolved Only engineering details remain to be worked out Difficult as these are, a solution will be found for each"

That was the confident opinion of Dr Hsue Shen Tsien, who has been working on jet propulsion projects at the California Institute of Technology, as related several years ago by Thomas E Stimson, Jr in *Popular Mechanics*, May 1950

In a similar vein, astronomer Ernest G Reuning, of the U S Naval Observatory, has stated, "Space navigation is no longer in the realm of science fantasy"

Says *Time* December 8, 1952, "Some serious scientists believe that space flight will surely come, and perhaps soon" Dr Wernher von Braun, famous for his work with the V 2 rockets during the latter part of World War II, believes that space flying rockets carrying men are "as sure as the rising of the sun" Says he, "Within the next ten or fifteen years, the earth can have a new companion in the skies, a man made satellite which will be man's first foothold in space"

Scarcely a month passes without an article or two on space travel appearing in some major publication When the Hayden Planetarium offered reservations to the moon several years ago, it received 25 000 applications from would be passengers, many of whom were serious about it

Not everyone, of course, is effervescing with enthusiasm about the idea Some of the experts feel that the problems are too great All the experts, whether optimistic or otherwise, recognize many serious difficulties Some of these are possible disastrous collisions with fast-flying meteoroids, the damaging effects of cosmic and other rays, the difficulty of movement within the space ship caused by lack of gravitational pull, the possible untoward effect on the crew of the rocket ship from extreme gravitational pull during initial acceleration while leaving the earth, the difficulty of carrying enough fuel to travel to the moon and back again possible damage to the human nervous system from lack of gravity, heating to incandescence of the space ship produced by extremely highspeed travel in the earth's atmosphere

The difficulty of reaching other stars is infinitely greater For instance *Time* says it would take 140,000 human generations to travel through space from earth to the Pleiades at 50 000 miles an hour In order for this to be accomplished careful preservation and recycling of all organic matter within the ship would be necessary In other words the bodies of those who died would have to be eaten because of space limitations, it says

Still other problems present themselves even if men still alive and in one piece, should land on the moon or elsewhere The moon has no water no plant life no fuel no atmosphere to breathe or to protect against the sun's rays or flying meteoroids Various planets are believed to have atmospheres of methane ammonia, and carbon dioxide, all of which are poisonous in large quantities and could in no way substitute for life giving oxygen On the side of the planet Mercury next to the sun the temperature is close to 750 degrees Fahrenheit and on Neptune it is something like 400 degrees below zero

Suppose men *did* arrive on the moon, as they seem bent on doing What would be gained? Such a feat would be of the greatest scientific interest without a doubt But beyond this what would be accomplished? The idea of living under a sort of plastic domed oxygen tent on the moon's surface, as has been suggested, is hardly an appealing one

The proposed man made satellite revolving in space above our earth would probably create more problems than it would solve Suppose that some other country should land a space ship on another section of the moon about the same time and dispute possession of that globe, even as South Pole boundaries are disputed at present Human nature being what it is, we might soon become involved in a three dimensional war, sending troops to fight on the moon, with space pilots blasting each other's ships between here and there! Although lunar exploration would be a boon to scientists, it would hardly solve any of the world's most pressing problems

Still, man's desire, so frequently expressed these days, to soar into space is not so far from becoming a reality as some may think Whether or not scientists develop a successful space ship, the Bible predicts that a sizable segment of the human race will definitely engage in a flight through space in the not too distant future But this will not come about through rockets with atomic power, but through Christ's return with divine power

Such a thing may seem startling, but it is no sectarian doctrine, no wild fanaticism, no visionary scheme Christ's return to earth is predicted at least *five hundred times* in the Bible—three hundred times in the New Testament! It is as true as the Bible itself, as reliable as the combined testimonies of Christ, Peter, Paul, James, John, and the holy angels And Christ's ascension to heaven proves it possible Listen to these positive promises which have been recorded for us

Christ Jesus "I will come again and receive you unto Myself that where I am, there ye may be also" "And then shall they see the Son of man coming in a cloud with power and great glory" John 14 3, Luke 21 27

Peter "When the Chief Shepherd shall appear ye shall receive a crown of glory that fadeth not away" 1 Peter 5 4

Paul "Looking for that blessed hope and the glorious appearing of the great God and our Saviour Jesus Christ" Titus 2 13

James "The coming of the Lord draweth nigh" James 5 8

John "Behold He cometh with clouds, and every eye shall see Him" "He which testifieth these things saith, Surely I come quickly" Revelation 1 7, 22 20

Two angels at Christ's ascension "This same Jesus, which is taken up from you into heaven, shall so come

in like manner as ye have seen Him go into heaven." Acts 1 11

Note the emphasis in some of these statements "I *will* come again," "*Surely* I come quickly" Bible writers entertained no doubts And the purpose of His coming is equally clear "For the Lord Himself shall descend from heaven with a shout . and the dead in Christ shall rise first then we which are alive and remain shall be *caught up together with them in the clouds, to meet the Lord in the air and so shall we ever be with the Lord*" 1 Thessalonians 4 16, 17

Man's plans are second best He hopes to fly to a sterile moon, at best a risky venture which could create more tension between nations than already exists But Jesus Christ is definitely planning to end the reign of sin here on this earth with a space flight to His kingdom of glory together with the saved of all ages and nations His kingdom is no airless, waterless rock pile Rather, it is as breath takingly beautiful as the Garden of Eden, with the glorious New Jerusalem, described in the apostle John's vision, as its capital

Granted that God made the world and all the tens of billions of blazing suns of the universe, together with their satellites, should it strain our credulity to believe that He can travel among the heavenly bodies He has created? If man in his relative ignorance hopes soon to dominate the ethereal spaces, is it not reasonable that God in His inexhaustible wisdom has always dominated them? Why should we doubt His promise?

Jesus is definitely coming, that where He is there *you* may be also Are you getting ready for that marvellous journey beyond the stars which will consummate God's great plan of salvation? Now is the time to prepare, for "Now is our salvation nearer than when we believed" Romans 13 11

LIGHT IN A DARK PLACE

(Continued from p 32)

ing to the scripture Thou shalt love thy neighbour as thyself, ye do well"

15 Matthew 22 39—This is the second of the two great commandments

"*And the second is like unto it, Thou shalt love thy neighbour as thyself*"

16. Matthew 22 36-38—The *first* commandments requires that God be given *first* place

"*Master, which is the great commandment in the law? Jesus said unto him, Thou shalt love the Lord thy God with all thy heart, and with all thy soul, and with all thy mind This is the first and great commandment*"

17 John 8 29—Jesus' Father had first place in His life

"*And He that sent Me is with Me the Father hath not left Me alone, for I do always those things that please Him*"

18 Matthew 26 39—Even in His last great struggle He yielded to His Father

'*O My Father, if it be possible, let this cup pass from Me nevertheless not as I will, but as Thou wilt*"

Before They Call

GORDON M HYDE

THE narrow, cobbled streets twisted their quaint and ancient way down to the salty quaysides of the Old Harbour of Plymouth, England As we drove our little car toward home, we noticed clusters of people staring up into the blue sky Being curious, we tried craning our necks out of the car windows to see what was "up" This practice proved dangerous in the narrow streets, so we pulled over to the curb, jumped out of the car, and stared skyward

There, high in the blue, was a tiny round object, silvery white in appearance It seemed to be growing larger and it was drifting It was a parachute Surely there must be a man up there 'twixt earth and heaven

Realizing that he was drifting toward "the drink," namely Plymouth Sound, we jumped excitedly back into the car and made off as fast as we dared toward the sea wall around historic Plymouth Hoe

As we drove we tried to keep track of the downward progress of the parachute Scarcely had we found a place to park the car, before we could plainly see an airman suspended from the parachute, and it was certain that he would drop in the water Dashing across the road to the sea wall, we were just in time to see him make a safe "landing," as he splashed a column of sea water high into the air

What excitement! The man was two miles from land at least But wait! A Royal Air Force motor launch was circling around, as though it had an appointment with the downed airman Within two minutes he had been pulled from the sea and was on his way to shore and medical care

The late evening newspaper removed all the coincidence from the rescue There had been a mock attack on the naval dockyard at Devonport that day, and in the afternoon one of the planes involved had developed engine trouble at high altitude, some distance down the coast The pilot was ordered by his squadron leader to make a crash landing in the sea at Plymouth Sound, if possible

A coastal radio station picked up this conversation, and things began to happen The message was transmitted to Plymouth R A F depot, and the rescue launch put out and was ready and waiting when the airman, who had been obliged to abandon his plane, finally hit the sea

This is a modern illustration of the way in which God hears His needy children even before they call for His help It reminds one of the experience of Daniel the prophet when he was distressed for the welfare of his people who were prisoners of war in a foreign land While he was pleading with God for help in their behalf, an angel touched him and said, 'At the beginning of thy supplications the commandment came forth, and I am come to show thee, for thou art greatly beloved" Daniel 9 23 Think of it! Help from heaven before the prophet had finished his prayer!

God is ever on the alert in behalf of his children His communication stations and rescue organizations are on twenty four-hour duty the year around None is beyond the reach of His help He assures us, "He that keepeth thee will not slumber Behold He that keepeth Israel shall neither slumber nor sleep" Psalm 121 3 4

As in the rescue of the airman full many a child of God can testify to the truth of the promise, "Before they call I will answer, and while they are yet speaking, I will hear" Isaiah 65 24 God knows your need before you ask Him for help But show your faith by asking for His help now Before you have finished your prayer, before you call, He will answer

Have faith in God!

Registered No. R 1886 Ref. No. L 5668

World's Largest Health Agenc[y]

THE World Health Organization, usually called WHO, is one of the largest of the specialized agencies of the United Nations It is dedicated by its Constitution to work for "the attainment by all peoples of the highest possible level of health"

Today the Organization—established as a permanent body on September 1, 1948—has a total membership of 84 countries in all parts of the world

Membership is open to all countries, for the aim of WHO is to aid all mankind But membership is not a condition of assistance WHO is prepared to give help wherever need exists

MEANING OF HEALTH

What does the word 'health mean?

Almost all nations have agreed, and state in the Constitution of WHO, that it means

"A state of complete physical, mental and social well being and not merely the absence of disease or infirmity"

Further, health so defined is "One of the fundamental human rights of every human being without distinction of race, religion, political belief, economic or social condition"

Finally, the WHO Constitution declares

"The health of all peoples is fundamental to the attainment of peace and security and is dependent upon the fullest co-operation of individuals and states"

The aim of WHO is to help governments to break the vicious circle of 'sickness breeds poverty and poverty breeds sickness"

There are two main reasons for the ill health which still afflicts the greater part of humanity The first is the lack of knowledge of how to tackle the problem, and the second is the grievous lack of trained people who can put that knowledge into practice

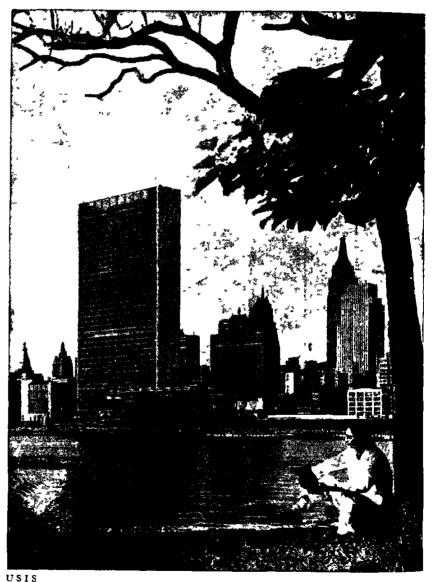
For practical help in solving these health problems, all nations can turn to WHO

Through its Advisory Services countries are provided, on request, with teachers and with demonstration teams consisting of a number of highly trained specialists Working side by side with them—and learning as they do so—are local people, assigned to the job by their own national health authorities In this way the work can be efficiently continued after the WHO experts have left

Behind the health workers in the field, and at the service of the peoples of the world, are the WHO Technical Services

Broadly speaking, these form the fact gathering arm of the Organization They also have the task of administering the international regulations passed by the Health Assembly

(Continued on p 28)

USIS

This is the headquarters building in New York, U S A., of the United Nations Organization of which WHO is a section.

46th YEAR OF PUBLICATION

November 1955

Contents

FEATURE ARTICLES

Page

FOR BOYS AND GIRLS

FOR MOTHERS

FOR EVERYBODY

OUR COVER

A halter made of silk's a halter still.—From Colley Cibbar, *Love in a Riddle*

Photo N Ramakrishna

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Minute Meditations

BOYS AND WHISTLES

D. A. Delafield

BENJAMIN FRANKLIN'S boyhood experience in the purchase of a whistle taught him a lesson he never forgot. He was only seven years old at the time, and paid four times what the whistle was worth. His brothers and sisters and cousins laughed so hard at his folly that he cried in vexation. When he reflected on his poor judgment he was caused more chagrin, he said, than the whistle brought him pleasure.

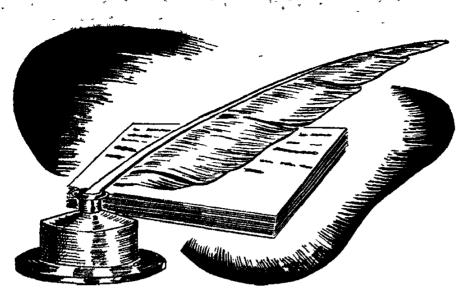
But he learned his lesson, and the experience was of use to him in later life. When he grew older he said, "When I was tempted to buy some unnecessary thing, I said to myself, 'Don't give too much for the whistle'; and I saved my money."

But Franklin, always a keen observer, saw that many others had not learned their lesson. He came to the following conclusion: "As I grew up, came into the world, and observed the actions of men, I thought I met with many, very many, *who gave too much for the whistle.*

"If I knew a miser, who gave up every kind of comfortable living, all the pleasure of doing good to others, all the esteem of his fellow citizens, and the joys of benevolent friendship, for the sake of accumulating wealth, 'Poor man,' said I, 'you pay too dear for your whistle '

"When I met a man of pleasure, sacrificing every laudable improvement of the mind, or of his fortune, to mere corporeal sensations, and ruining his health in their pursuit—'Mistaken man,' said I, 'you are providing pain for yourself, instead of pleasure; you give too much for your whistle.'

"If I see one fond of appearance, or fine clothes, fine houses,

(Continued on p 5)

THE EDITOR SAYS

WHAT about family planning? We know that there are many in Southern Asia who look upon family planning as iniquitous. There are others, who, just as sincerely, support it in any and every form without question. The vast masses, however, are still left in gross ignorance. There are multitudes of parents or prospective parents who, though literate and therefore capable of wider knowledge, make no attempt to plan their family intelligently.

Let us think seriously for a few minutes about this matter of family planning. Many parents are guilty of grievous wrong against society. Without consideration as to whether or not they can do justice to a large family, they fill their houses with helpless children who are wholly dependent upon them for care and instruction. In many cases this is actually criminal conduct because the parents are not capable of providing even adequate food, shelter, or clothing for these little ones, to say nothing of providing them with proper instruction. The inevitable result is that such youngsters as may survive, grow up to swell the ranks of the paupers and the criminals.

It is a fearful responsibility that rests upon parents when they bring a child into being. It would be better for the human race if men and women would carefully consider the matter from all angles before bringing another being into existence.

In the first place, does the mother have sufficient strength to care for her children? Many women do not. Many a mother has been snatched from her family by the cold hand of death because of the too-frequent bearing of children. In the second place, can the father give such advantages as will rightly mould and educate the child? Common sense requires that parents act as rational beings and that they live and plan in such a way that each child may be properly educated and that the mother may have time and strength to properly discipline her children. The husband and father should see to it that his wife—the mother of his children—is not placed in a position where she cannot possibly do justice to her numerous little ones so that they have to grow up without proper training.

People should not increase their families any faster than they know that their children can be well cared for and educated. It is an absolute injustice for a woman to have a child in her arms from year to year. Such lack of planning and common sense lessens—nay, usually destroys—social enjoyment and inevitably increases domestic wretchedness. It deprives children of that happiness, care and education which it is the duty of the parents to bestow upon them.

How little thought is given to the welfare and destiny of the child! The gratification of passion is the only consideration. The mother's vitality is undermined. Her health is broken, and in utter discouragement she finds herself surrounded by a flock of children whom she cannot properly care for.

Such children, lacking the instruction they should have, grow up *to the dishonour of their* parents, their community, their nation and their God. In this way, an army is being raised up in the world which is managed by the evil one to suit his will.

Parents should realize that they have no right to bring children into the world to be a burden to others. If parents cannot properly care for their own children, they are guilty of an offence against society, a crime, if you please, if they bring innocent children into the world to suffer for want of proper food, proper care, proper shelter, proper clothing or proper education. Is it too much to say that husbands and wives who cannot take care of themselves should not have children?

Many who barely eke out an existence when single, choose to marry and raise a family—knowing all the time that they have no way to support that family and still worse—they have no family government. Their whole life is marked by their loose, slack habits. They are lacking self-control. They are passionate—sensual, they are impatient and fretful, they are lamentably ignorant of the most

essential facts of life, they fail to realize that the sensual indulgence of this age is ruining the physical and moral health of multitudes One has said, "If the many crimes of this time were traced to their true cause, it would be seen that they are chargeable to the ignorance of fathers and mothers who are indifferent on this subject Health and life itself is being sacrificed to this lamentable ignorance"

There aren't any clinics that can really correct the condition of which we write today The only way in which these wrongs can be made right is for men and women to become intelligent regarding the laws of life and then to practise self-control which is the outgrowth of intelligent common sense

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Boys and Whistles

(Continued from p 3)

fine furniture, fine equipages, all above his fortune, for which he contracts debts, . . . 'Alas!' says I, 'he has paid dear, very dear, for his whistle.' . .

"In short, I conceive that the great part of the miseries of mankind are brought upon them by the false estimate they have made of the value of things, and by their *'giving too much for their whistles.'* "

We can excuse a seven-year-old boy who overspent for his whistle But how about adults who waste large sums of money on liquor and tobacco, gambling, and the vanities of the world? "Boys with whistles," we say. Yes, and how much happier they would be if they would spend their time and money on their families—perhaps on the poor and the sick. In that way they could make life worth living.

Franklin learned his lesson when he was young. Some of us learn when we are older. The important thing is to learn, and to do something about it before our brief span of life runs out If the will seems weak, give God a chance to help. Prayer and faith will work a greater miracle in your life than you think possible.

WHAT'S IN THE NEWS?

Vitamin like **chemical substances found in the under peel of oranges and lemons dramatically shorten the duration of the common cold and other virus infections and even cure one type of eye cataract, four U S doctors recently reported in the *American Journal of Digestive Diseases***

The substances are called bioflavonoids of Vitamin P They act by strengthening the walls of the capillaries the tiny blood vessels which form networks throughout the body This increases the body's resistance to inflammatory processes Though the bioflavonoids have been known since 1936, the latest reports show that they work much more quickly and effectively than was previously realised *The doctors reported* that they have had "dramatic" results in treating bursitis, which is among the most painful of all inflammatory ailments

* * * *

"Indeed there is abundant evidence that none of the known effects of work can harm healthy tissues," declares W Melville Arnott in **Lancet** Work can help develop and extend the range of mental and physical mechanisms

"The evil reputation of work as a cause of disease springs from two rather disreputable and quite illogical traits in human character," Arnott says "The first is the widespread reluctance of medical men to admit frankly that they are ignorant of the cause of disease—that they do not know why a particular person's blood pressure had risen or a clot formed in his coronary artery

"The second is the very understandable but really quite indecent avidity with which a patient accepts the explanation that his illness is due to overwork and insufficient rest It is a belief which nourishes his amourpropre [self esteem], it enrols him in the noble army of martyrs, he has fallen fighting the good fight Believing this he can relax with a clear conscience and enjoy to the full the provisions of a welfare state, the bondage of a possessive wife and the plaudits of an admiring family"

* * * *

In the past 18 months 1 500 000 U S cigarette smokers have sworn off the U S Bureau of the Census reported after completing a survey of the smoking population for the National Cancer Institute Still smoking 38 *million most of whom run through 10 to 20 cigarettes a day*

* * * *

Parents should stop worrying about eyestrain among teen age children Dr Warren A Wilson told a panel on adolescent problems in Los Angeles *Reason eyes are designed to last 100 years barring disease or injury* Ophthalmologist Wilson advised parents not to force adolescents to wear glasses if they don't want to "It really doesn't do any good to force them, *and it doesn't make that much difference"*

* * * *

Drs Ray C Anderson and Harold W Hermann of Minneapolis made a plea, in the **A M A Journal**, for doctors to report extremely rare cases *of leukemia in identical twins* to medical groups involved in leukemia research Purpose of the request to learn more about hereditary factors in the disease by studying its effect on two humans coming from the same ovum

* * * *

Owing to the complicated movements of Jupiter's moons, their paths are extremely difficult to calculate and the eighth moon which is 100,000 *times fainter than the faintest visible star* had not been seen for fourteen years An electronic brain however re calculated its path in twenty minutes, and it was re identified early this year at Mt Wilson observatory, California

* * * *

Some months ago the first trans polar air service between Copenhagen and Los Angeles was inaugurated by Scandinavian Air Lines In June a *Canadian service* was established connecting Amsterdam and Vancouver across the Pole and a third is expected to begin later in the year, linking Copenhagen and Tokyo

Your Mental Appetite

ADLAI ALBERT ESTEB, Ph.D.

Be a man! Keep yourself under control.

DETERMINE right now that you will be master of your appetite, that your appetite will never control you Your physical health is affected by what you eat, how much you eat and when you eat But you have a mental and a spiritual appetite as well as a physical appetite, and they also affect your health and happiness We cannot divide man into three watertight compartments and say, "This is mental, this is spiritual and this is physical " What affects one phase of man affects the other phases We must deal with man as a unit, an entity the total man

It is to this total man that we address the question Is your appetite under control? In answering the question, keep in mind that the word *appetite* is derived from the Latin *appetere*, which means to strive after, to long for, to seek What are you seeking? What do you want?

Charles Whymper painted a picture of the gloomy valley where Lord Carnarvon found the tomb of the Egyptian King Tutankhamen Above the towering peaks in the picture on a lofty eminence a vulture stands poised for flight, wings outstretched Thinking, doubtless, of the incalculable wealth found in the tomb, the artist entitled the picture *What the Vulture's Eye Hath Not Seen* The vulture could see a dead animal many miles away, but for all his telescopic sight he missed the best! He did not see the glorious treasures in King Tut's tomb But of course that wouldn't worry a vulture!

The vulture has an appetite for carrion, nothing else That is what makes a vulture a vulture He has an eye for carrion He looks and searches until he finds carrion

From this we may draw three significant lessons

1 Appetite is the basis of character

2 Character is the basis of vision

3 Vision is the basis of achievement

In contrast to the vulture, man has an appetite for everything rich and rare on the planet He does not care how high he has to climb how deep he has to bore, or how far he has to travel, if only he can secure the treasure he has his heart set on He seeks what he counts precious That is what makes a man a man

Life consists largely of selection and elimination by means of appetite A little child has an appetite for everything My little grandson samples everything he can touch He wants everything he sees He grasps at every object, whether a piece of paper, a pansy, a penny It is all the same to him, and into his mouth it goes. The years will teach him to discriminate. As he grows older, he will lose his appetite for things. In fact, he loses his appetite for something nearly every day he lives; finally, when old, he

USIS

What shall our children read? This is a serious question and demands a serious answer.

will have only his master passions remaining By these master passions he must stand or fall!

A drunkard's last request is one more drink Contrast that to the request of Sir Walter Scott, who said when dying, "Bring me the Book"

"What book, Sir Walter?"

Back came his deathless reply, "There is only one Book for a dying man"

What do you hunger and thirst after? What do you want? "Blessed are they which do hunger and thirst after righteousness for they shall be filled" How careful we should be in what we desire, in what we seek after.

Someone has said, "Character is what a man does in the dark" Tell me what a man secretly longs for and I will tell you what a man really is Hugh Black, in *The Dream of Youth,* puts it "Tell me your dreams and I will read the riddle of your life, tell me your prayers and I will write the history of a soul, tell me your askings and I will tell you your gettings, tell me what you seek and I will tell you what you are I do not wish to know your possessions, only your wants I care not to know what you have, keep it, only what you have not and desire to have Not your attainments, but what you have not yet attained and follow after That which comes to you in your visions by day and your dreams by night, the ideal you set before you, and the things which you approve as excellent, what you seek after and have given your heart to, these are the measure of a man"

It is clear that what you really want is the basis of your character

The second point is that character is the basis of vision Because the vulture is a vulture it sees only what appeals to the vulture appetite Because a man is a man he sees the things that are precious in his sight

USIS

Never should books containing a perversion of truth be placed in the hands of children or youth

What you think is the key to your charater If you think inferior thoughts, you will be an inferior man If you think superior thoughts, you will be a superior man "As he thinketh in his heart, so is he" Lord Halifax put it this way "Any thought that you think long enough will take you prisoner" Your soul is dyed with the colour of your thinking

We see with the eye that we bring to see

There's a sermon in the lily,
There's a sermon in the brook,
There's a sermon in the sunset,
But man's too blind to look,
Too blind to see the diamonds
Studding coronets of night,
Too blind to see the pearls of dawn,
The mind of morning light
Too blind to see the heaven
In the laugh of baby's eyes,
Too blind to see religion
In the rainbow of the skies

Yes, many men are blind Because they do not look, they do not see

A man viewing the paintings in an art gallery had a sharply critical attitude The curator heard him comment adversely on nearly every masterpiece Finally the curator passed the point of endurance

'Sir," he remarked, approaching the offender, "it is not the pictures that are on trial It is the visitors"

Yes, character is the basis of vision

Throw a coin on to the floor, and everyone turns to look Many hear the clink of money, for they are schooled to that But do they hear the "still small voice" or other sounds that keener ears may hear? Radio has taught us that we must be in tune with the right station to hear its music

The things of life that you are in tune with are the things you decided for every day of your life up to the present You were influenced by your inherited qualities, but you yourself are responsible for your final standards and ideals

Let us imagine a group of men walking down the street They pass a vacant lot One, a businessman, in his mind sees an office building rising there Another, a schoolteacher, envisions a schoolhouse A preacher in the group observes the same lot, and he sees it in terms of his own experience in life—in terms of his own character Thus

(Continued on p 28)

PROTECT YOUR CHILD'S TEETH

ROLAND M. SWANK, D.D.S.

All youngsters are susceptible to tooth decay. But most need not be victims of it

ONE hundred per cent of the world's children have a tendency to tooth decay But that doesn't mean that there are not measures that can be taken to prevent decay and save our children's teeth Parents have every reason to take advantage of all the information and preventive techniques available Even, well-spaced, clean teeth are not only necessary to good health but they are a personal and social asset

How many boys and girls do you know who would be nice-looking children but for their badly decayed, missing, or crowded teeth? Except for some unusual condition, no children would need to be victims of these beauty- and health-destroying evidences of dental neglect. It is generally accepted that poor teeth can cause digestive disturbances, sinus trouble, and hearing difficulties

When should dental care begin for a child? One authority has suggested that the proper time is during the life-time of his great-grandparents, for heredity does play a part in the kind of teeth a child will develop Few young couples, however, inquire into the history of their respective grandparents' teeth when planning marriage

The best a mother can do to protect her child's teeth is plan months before or during pregnancy to build up her calcium nutrition so that she can create good bones for her child, remembering that teeth are simply modified bones Your doctor will be able to suggest the proper diet to accomplish this

Usually a physician will advise that you drink a pint of milk a day and get plenty of vitamin D, which will help you store up in your body the essential substances

N Ramakrishna

Parents, take full advantage of the information and preventive techniques available today to ensure that your children have strong, healthy teeth.

for the manufacture of good teeth. Pre-pregnancy nutrition is important, for proper food intake during pregnancy is often prevented by nausea and vomiting, especially in the early months

This suggestion may seem a little difficult to follow, since the advent of an addition to the family is not always anticipated, but it can be done We all know that one pint of milk is recommended as a part of any adult's normal diet, and that it is always essential to eat foods containing vitamin D for routine health care

Keep in mind, however, that there is no nutritional factor that is a specific for teeth A diet balanced in nutrition and adequate for general health is also adequate for dental health

The reason emphasis is placed on diet during pregnancy is that so often we have developed poor eating habits in the rush of daily living, and such habits are likely to carry over When a little one is on the way, we have no right to be careless, nor do we wish to be, for a child should have the best that it is within our power to give

In the seventh week of pre-natal life the formation of the jaw bones is begun The fœtus needs early bone building not only for proper development of the jaw but also for the teeth If essential substances are lacking in the mother's diet, they will be lacking in the child's nutrition

After birth, milk and the sunshine vitamin, which can be given in cod-liver oil, become daily routine Vitamin C, essential for mouth health, may be supplied in the daily orange juice When an infant's diet is lacking in vitamin D, the hardening of bones and teeth is disturbed, and may result in tooth decay. Though nutrition plays no direct role in the completion of enamel and dentine, the growth of the gingivæ, the tissue that clothes the neck of the tooth, is influenced by nutrition throughout life Gingival disease, which can lead to inflammation of the membrane of the tooth socket, is the greatest single cause of tooth loss in adults

A V Ramamoorthy

The best a mother can do to protect her child's teeth is to plan months before or during pregnancy to build up her calcium nutrition

Exercise of the jaws is most important for a baby's teeth After six months the growth and health of the jaws can be aided by providing good chewing objects, so that the little one will enjoy this exercise Tough bread crusts, zwieback, carrots, and teething rings are good chewing objects. A teething ring should be attached to a ribbon and washed and sterilized frequently to keep it clean When the jaw growth is thus encouraged, there will be a regular and even opposition of the upper and lower jaw arches, necessary to good teeth and facial symmetry

Some dentists recommend cleaning first teeth with gauze dipped in milk of magnesia. Consult your own dentist on the advisability of this procedure It is generally

(Continued on p. 28.)

AMBITION and BLOOD PRESSURE

JESSE C. BURT, Ph D.

NOT long ago a well-run State prison measured the blood pressure of its population Guards and inmates alike were asked to roll up their sleeves, have the cuff fitted around their arm and then watch while physicians squeezed the little ball that closes the cuff over the artery The average prison guard in this particular test had a blood pressure of more than 140 millimetres of mercury, which denotes high blood pressure The inmates, on the average, did not have hypertension, as we now are calling high blood pressure

We know today that tension and ambition do help to develop the disease of civilization that we call hypertension.

High blood pressure was particularly noticed in tall, lean, pale-faced guards Several of these guards were career men They worried incessantly over target practice, the nightly count of prisoners and the lock-up, and the whole process of guarding men reluctant to be supervised Some of these career men hoped to move on to the Federal prison system, which in many cases is the pinnacle of a guard's aspirations

Why didn't the prisoners develop hypertension? We might better ask why the guards did develop it The never-escaped sense of responsibility and its grinding tension go far to explain why the guards had high blood pressure

We know today that tension and ambition do help to develop the disease of civilization that we call hypertension We see this principle work out in top business executives The more responsibility, the more high blood pressure Hypertension is a top-management problem at the present time We used to speak of the tired business executive Now perhaps we say "tense business executive" in many cases.

Not always, but often enough to be dramatic and important hypertension is related to a personality defect Let us imagine we

You are less likely to be confronted with high blood pressure if your life is placid. It can be.

We're talking about an actual woman now (though it could be a man). We will give the woman a name, Mrs Randolph.

Mrs Randolph is tense, the muscles of her shoulders are like marble She worries a lot, she gets depressed She is somewhat inhibited, often feels a restraint about telling her children what is bothering her When her married children come to visit her, it takes her an hour or so to warm up, get over her inhibition and talk!

Mrs Randolph developed high blood pressure in the past five years and it frightens her It also gives her a good deal of discomfort She told her physician, "I want to fight, to scream and shout, but something holds me back"

Mrs Randolph's inhibition probably dates back to childhood experiences Her parents were probably too severe and unsympathetic Perhaps she was discouraged from expressing herself and developed an inner fear of speaking freely This explains why she has faltered through life always on the defensive, not liking a lot of things as they are but afraid to fight Mrs Randolph has an internal tug-of-war between herself and her outside situation

A person like Mrs Randolph may be highly ambitious To overcome the feeling of insecurity he usually aspires to positions or ambitions that perhaps are beyond his reach He may be aggressive by nature and yet unable to express his aggressiveness He bottles his feelings inside. The resentments he cannot resolve must come out somehow and his body takes the beating His physical health suffers

Another kind of hypertensive personality has the basic problem of outwardly submitting to authority yet inwardly hating to do so To take orders, either from a superior or from life, causes him to rebel When he has to take orders his blood pressure flares up to quite a level

It is often typical of the hypertensive person that he is always on the go, is restless, bouncing with energy, can't keep his feet or hands still, always wants to do something He is a man of action, yet is tense, wary, suspicious, afraid of committing himself He never quite crosses the many Rubicons that confront all of us in our daily living

Many hypertensive persons are like Mrs Randolph in the matter of lacking real satisfaction in living Mrs Randolph has many abilities, but she never feels that she has done a good job at anything Often she will not attempt a project because she thinks she will fail

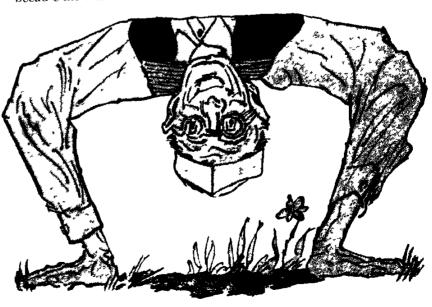
Clearly, the inhibited personality is marked by emotionalism. The tension within the person plus the ambition to excel can cause him to go on an emotional jag Before long the whole family is involved Often the physician must be called to calm the person Frequently he finds the blood pressure of his patient sky high

There are a number of ways the hypertensive can help himself dissolve inner tensions, cope with the demon of ambition, and sidestep emotional storms These suggestions conscientiously practised can change a person's viewpoint toward life and make life much better

1 Acquire a feeling of detachment regarding your problems A helpful expression is, "Today is the tomorrow I was worrying about yesterday" Many people have helped themselves by saying, "It doesn't really matter, does it? It's all in my mind"

2 Don't be a sky-rocket personality Avoid all extremes of emotions The Greeks advised moderation in all things This is very true with emotions, which can hiss out like a four-anna sky-rocket

3 Watch your fatigue "I won't decide that until in the morning,

(Continued on p 28)

Make BEDTIME *a* GOOD TIME

MIRIAM GILBERT

IS BEDTIME a bad time for you and your child? It could be one of the high spots of the day It gives you a chance to get to know your child better and to relax with him Make bedtime something your child looks forward to eagerly Make it a time you yourself will look forward to, and he will naturally follow your lead

Here are a few suggestions that apply to the babe in arms or the boy in training pants

Try a short story-telling session There are some wonderful bedtime stories printed in delightful book form that are perfect for going to sleep Stories with simple words that can be told in a soft, low voice are good Save the exciting stories for daytime telling

The practice of story-telling at bedtime is comforting for you as well as your child It gives you a moment to sit down peacefully and concentrate on one small thing It will bring back memories of your own childhood, and recall to mind many of your own favourite stories

Getting yourself into the spirit of the hour will help you to get expression into your voice Children do not like a monotonous story-teller When little Johnnie wins the spelling prize, your eyes must shine and your voice must have an eager, happy lilt to it

Even if your child is too young to fully understand the story, the sound of your voice will have a subduing effect on him If you prefer, you can substitute a five-minute conversational chat Treat your baby like a grown-up, and he'll treat you with respect

Don't rush bedtime Don't dump your child into bed as if he were a sack of potatoes and sigh, "If I survive another day like this, I'm made of iron" Children resent this brusque, out-of-my-way treatment at any time If you can learn to smile when Mrs Smith from across the way comes visiting on your busiest day, you can learn to smile when putting baby to sleep after a round of mischief

A lullaby is soothing You don't have to be a Lily Pons A soft, crooning, even humming voice is enough And you need only one song Children don't mind hearing the same thing over and over again Actually a certain song can come to mean bedtime, sweet relaxation with you, and sleep If singing embarrasses you, a gentle religious song played on the phonograph will work wonders

Spare a moment to cuddle your baby before putting him into bed If you have time, sit down and cradle him awhile in your arms Close your own eyes as if you were sleeping Children may get the impression that grown-ups never sleep You're always awake when your child is up, and he's likely to be fearful that he's missing something

Have all home activities quieted down when the baby is going to sleep Even the clatter of a pan is fascinating to a curious child If you have guests, ask them to speak softly Turn down the radio or television set

Try to establish a sleep habit Go through the same routine every day Have baby's night clothes ready, so that you won't have to scour through two or three drawers looking for a fresh pair of pyjamas Open the window and pull down the shade in an orderly way Let them be signals for sleep Make bedtime the best time of the day

B Ranganathan

Bedtime is one of the high spots of the day It gives you a chance to know your child better and to relax with him.

R Krishnan

ATHLETE'S FOOT

ROBERT P. LITTLE, M D

A stubborn little fungus has taken a fancy to living in the human skin, especially of the foot.

EVERYONE has heard of yeasts, fungi, moulds and mushrooms You probably know that they are plants devoid of chlorophyll, or green colouring matter, that are able to live without light Most fungi live on decaying animal matter But there is a group that have become adapted to living in the human skin and certain of them cause athlete's foot

Modern man too often wears airtight shoes that are too small for him Such footwear presses the toes together and excludes the air As a result the skin becomes warm, moist and sodden This is just the sort of environment athlete's foot moulds thrive in

You can pick up these fungi in locker rooms, showers, gymnasiums, swimming pools and at beaches—almost any place where you and other persons walk barefoot Contagion is easy

On the other hand, fungi will not grow in the skin of all people, some persons have a natural immunity

Others have a natural predisposition All unwittingly, they practically invite the growth of fungi

Once fungi become established in the skin, they grow and cause itching, blisters and perhaps considerable inflammation They may even get into the blood stream, to be carried to the hands, where they may cause an allergic reaction

The patient should not use strong medicine to kill the fungi, because he may add to the already existing inflammation Further-

Footwear that is airtight and often too small causes the skin of the toes to become warm, moist and sodden—the ideal environment for athlete's foot mould to thrive in

more, his skin may become sensitized to these medicines and he may develop an acute skin disease

The person who has athlete's foot should consult his doctor, who knows what medicines to avoid He may have the patient soak his feet in weak permanganate solution and tell him to boil his socks and change them daily He may also advise roomy shoes of porous leather (The present vogue of sandals for women is a fine treatment *for athlete's foot, because fungi do not thrive in dry skin*) The doctor may also advise the patient to use unscented talcum with 5 per cent of boric acid

Athlete's foot is worse in summer and in tropical regions The fourth and fifth toes are more closely pressed together in shoes than any other toes or parts of the foot, hence the trouble is at its worst in this area For a rapid cure keep the feet dry and wear orthopædic shoes

Not every foot eruption, however, is caused by fungi Probably not more than fifty per cent of them are due to moulds

High heels, non-porous leather and tight shoes may be responsible for keeping the eruptions in an active state The normal human foot is beautiful and the shoe should fit the foot—not the reverse Pointed shoes may be thought attractive by misinformed people, but how much more important that you consider the foot inside in order to avoid bunions, corns, hammer toe and *unhealthy skin* Spend your time in keeping your feet beautiful by wearing sensible footwear Never jeopardize them by searching out the most dainty and fashionable shoes, regardless of fit and comfort

"CAT SCRATCH" DISEASE

MARY ERNSTING

"Cat scratch" disease first appeared in articles written by doctors only six years ago. It is considered a rare disease.

"DAVID, stop mauling that cat! He has your sister *all* scratched up! Do you want a sore arm like hers?"

David looked up, saw that he was within easy reach of his mother's hand and sullenly dropped the cat He didn't want to give up his pet

In just such an unconcerned manner a rare illness was allowed to exist unrecognized and unfettered in an otherwise intelligent household, for the sore arm of David's little sister later proved to be infected with the virus of "cat scratch" disease.

Courtesy, "The Saturday Evening Post."
The virus of "cat scratch" disease has been found in cases of infection associated with bites, licks, scratches or simply the presence of cats.

As the name suggests, most cases of the malady have been found to be associated with the bites, licks, scratches or simply the presence of cats. But it is well known that other animals and even inanimate articles contaminated with the virus are capable of transmitting the disease Furthermore, no animal needs to be sick or even have the virus in its blood to do this

It has been only within the past five or six years that reports analyzing it and describing its characteristics began to appear in the general medical literature. For the past twenty-five years, however, the disease has been recognized as a separate illness and persistently investigated

A virus is thought to be the cause of cat-scratch disease. Although a scratch, scrape, puncture or other break in the skin making an easy port of entry is probably the manner in which the virus is most often introduced into the body, the disease can enter without such an

vious and royal [illegible] ears that the [illegible] capable of entering [illegible] through unbroken [illegible] membrane.

The symptoms of cat-scratch disease may be few or lacking in the mild type or in the quiet stage of an average case. Or they may be stormy, with chills, fever and malaise gripping the patient having virulent type or in the progressive stage of an average case.

The most consistently characteristic feature of the disease is swelling of the infected lymph glands. Whether the place of infection is the hand or elsewhere, the lymph glands draining that particular place become enlarged and may even become painful or tender

This swelling may remain quiet and heal without treatment Or it may be active, showing all the signs of local inflammation, associated pain and finally pus formation

Usually the disease remains quiet, stays in one place and clears up within a short period of time Rarely, if ever, do patients have symptoms or signs of it for more than a few weeks, though a chronic condition is said to be possible.

Cat-scratch disease may prove confusing at times It may imitate rabbit fever, tuberculous glands or other conditions that produce lymph gland enlargement or even skin rashes It may also imitate some of the acute contagious diseases. Laboratory examination seldom reveals the nature of the condition or helps to clear up the picture

Sure diagnosis of cat-scratch disease is dependent almost entirely on the skin test If the skin reaction is positive, usually within twenty-four to seventy-two hours a small pimple surrounded by a reddish blush appears. This test is sensitive, and in many cases the skin may be positive to the test as long as four years after recovery

There is no specific treatment for the disease, but unless a patient comes down with it when he is fighting some grave illness, he is reasonably certain to recover Some of the miracle drugs were not found to be of particular value in treating it, but others were reported to alter the course and hasten recovery

Cat-scratch disease is not limited to any particular part of the world It seems to make its appearance anywhere and at any time, for reports indicate that it is found all over the world Experience reveals that it is not significantly affected by season, climate or other conditions that might well be expected to influence it

The disease is not common Fewer than three hundred cases have been reported by medical writers If you love cats you will be glad to learn that it also goes by the non-defamatory and possibly more appropriate name of benign inoculation lymphoreticulosis

Don't take a complacent attitude toward cat-scratch disease Stay on the healthy side of life and avoid all disease possible—whatever the cost in less-important considerations

CIGARETTE PAPER AND CANCER

The possibility of a link between lung cancer and cigarettes may lie in the paper in which tobacco is wrapped, according to Dr Donald V Lefemine, research chemist of the Cancer Institute, Miami Florida

Reporting to the American Chemical Society in Birmingham, Alabama, Dr Lefemine stated that his studies show that the chemical responsible for causing cancer in laboratory animals is benzpyrene, found in the smoke and tars from burning cigarette paper Dr Lefemine found that there are 1 to 3 parts of benzpyrene in *one* million parts of cigarette paper, and he points out that 2 parts per million will cause cancer in animals

Interestingly enough, the start for this study came from H J Rand of the Rand Development Corporation of Cleveland Mr Rand some years ago burned some cigarette paper and extracted benzpyrene from it Not being a medical scientist, he did not publish his findings, but turned them over to the Cancer Institute at Miami Mr Rand credits Thomas A Edison with being the first to point the finger at the paper of cigarettes as constituting a danger to health, and quotes a letter of Edison's to the automobile inventor, Henry Ford, as follows

"Friend Ford I've studied cigarettes The noxious part is the paper It affects the brain"

However, even though the cigarette paper is *incriminated* as containing a cancer-causing chemical, still to be explained is why men who smoke one pack a day have death rates from heart disease more than twice as high as non-smokers in the 50 to 65 age group.

COLD CAN SAVE YOUR LIFE

BEN and MARIE PEARSE

From *The Saturday Evening Post*

When surgeons opened up the patient's chest to remove what they thought was a tumour, they were suddenly confronted with a much more difficult problem. The 25-year-old man's life was being endangered not by a tumour but by a balloonlike sac, an aneurysm, bulging out from the weakened wall of the aorta, the principal blood vessel leading from the heart. The thin-walled sac, pulsating with every heartbeat, might at any moment burst and cause the patient to bleed to death. Yet to cut out this dangerously weakened area and sew up the aorta again would require shutting off the patient's circulation during part of the operation, and that would be hazardous, since the brain could not safely be deprived of oxygen-carrying blood for more than three minutes.

In this instance the problem was solved and the man's life save by a few quarts of ice water, employed in a new technique called hypothermia. The word simply means abnormally low temperature. The method, being applied in an increasing number of surgical situations where bleeding is a serious obstacle, involves cooling the body to 10 to 20 degrees below the normal 98.6 degrees Fahrenheit. This reduces the oxygen needs of the brain and other tissues and permits surgeons to stop circulation longer than they otherwise could. For example, as the temperature falls to 80, the heartbeat and respiration slow to about half their normal rate, and the oxygen requirement of the tissues declines to about a fifth the usual amount. The individual is then living, so to speak, in semi-hibernation. Although a rise of 10 degrees above normal probably would be fatal, the chilling to below normal levels, if carefully controlled, is accomplished without after effects.

How valuable a period of slow-motion existence can be is illustrated by the experience of the young man with the dangerously large aortic aneurysm. He was being operated upon in the George Washington University Hospital, Washington, D. C., by the staff, headed by Dr. Brian Blades, the chief surgeon, and his associate Dr. Howard C. Pierpont, who have made important contributions to the hypothermia development. To meet just such emergencies as they now faced, they had installed beside the operating table a tank of salt water--of the same salinity as body fluids—and equipped it with a cooling coil surrounded by chipped ice. As soon as it was apparent that shut off of blood flow to the brain would be required for the type of

Ice water, employed in a new technique called hypothermia, can make a patient insensitive to pain, slow bleeding and help the surgeon in performing critical operations with greater safety

operation that would give the patient his best chance of survival, Doctor Pierpont turned a stream of the iced salt water into the patient's opened chest cavity. This chilled the heart, lungs and large blood vessels and the blood flowing through them. As the cooled blood circulated through the rest of the body, the patient's temperature gradually declined to 86 degrees, and at that point tests indicated his individual tolerance had been reached.

The cooling took about an hour and a half, and during that process another important feature of the hypothermia began to take effect. It has been discovered that when the body temperature falls a little below 90 degrees, the cold alone serves as an anæsthetic, and the need for anæsthetic drugs is lessened or abolished. When this patient's temperature reached 86 degrees, he no longer needed an anæsthetic gas and it was possible to give him only 100 per cent oxygen through the mask. Yet the operation upon the bulging aorta could be resumed without his feeling any pain.

First, clamps were applied to the aorta on both sides of the enlargement, halting the blood flow to the brain. Then the sac was cut off, leaving a short neck with which to effect a proper closure. Sewing up this opening was a delicate bit of surgical embroidery that restored the aorta almost to its natural contour. The blood flow to the brain had been interrupted for more than nine minutes—three times the normal limit—when the clamps were removed and circulation resumed its normal course. Finally, the coolant was replaced with a warm solution to bring the man's temperature back to normal. As it approached that level, the chest incision was closed and he was taken back to his room. Eleven days later he was discharged, free of the sac which had constantly threatened his life.

The use of hypothermia, of course, is not restricted to surprise situations such as that just described. The apparatus that Doctors Blades and Pierpont had devised for their own speciality, chest surgery, is always ready for emergencies, but was developed for general use in operations on the major blood vessels which require interrupting the blood flow to the brain. There is a growing list of operations that, before hypothermia, might not have been attempted but which have saved lives or prevented chronic invalidism.

Besides greatly extending the scope of surgery on the large blood vessels—circulatory defects are revealed with increasing frequency as the population grows older—hypothermia

In some of the modern hospitals today the technique called hypothermia is being tried out with great success.

also has achieved a long-sought surgical goal, an operation on the inside of the heart under direct vision and without the flow of blood to hamper the surgeon at work. The surgeon can do a swifter and surer job in a bloodless field where he can see the defect. That is now possible at Children's Hospital, in Washington.

Eight-year old Johnny Brown was a "blue baby." The cause of cyanosis, or blueness, was a congenital defect inside the heart. The operation on the heart would take only about six minutes, but since Johnny would be in the operating room for about four hours, there were two heart specialists, two anæsthetists, a heart surgeon and three resident surgeons on hand. Completing the team, especially trained for this type of operation, were two nurses, two orderlies and a maintenance man, who was responsible for proper functioning of the equipment and who also regulated the temperature of the water when it was turned into a mattress filled with flexible coils that was spread over the operating table.

When the anæsthetic had been administered, a bath tub filled with ice water was rolled into the operating room and Johnny was lifted into it. Because of anæsthetic gas, Johnny felt no discomfort as the water, kept at about 40 degrees, gradually lowered the temperature of his body. When it reached 83 degrees, cold was sufficient anæsthetic. The anæsthetic gas was cut off and 100 per cent oxygen was substituted. Johnny was lifted back onto the mattress, through which cold water was being circulated to keep his temperature constant. His pulse was about forty beats a minute, less than half of normal, and his respiration and circulation had slowed correspondingly. The heart surgeon opened the chest area in preparation for the operation on the heart itself.

Clamps were applied first to the vessels bringing blood into Johnny's heart. A few moments later, after the heart had pumped itself empty, clamps were applied to the vessels carrying blood away from his heart. Then, in accordance with the advance diagnosis, the surgeon made an incision in the right ventricle, the chamber which pumps venous blood to the lungs to be aerated. One glance showed him that the obstruction he was looking for was a membrane that had formed just below the outlet valve and was cutting off most of the supply of venous blood to the lungs. The heart was still beating slowly, but there was no blood to interfere as the surgeon cut away the membrane with a few rapid strokes of his scalpel and removed it. Filling the heart with salt water to prevent any air from getting into the circulatory system, he closed the incision, removed the clamps, and the flow of blood throughout Johnny's body became that of a normal child.

At the completion of the operation, Johnny was lifted back into the tub. The ice water had been replaced with hot water to re-warm him as rapidly as possible. As his temperature neared normal, he was lifted out again and taken back to his bed, somewhat drowsy, but able to talk and recognize his mother and the doctors. In an hour or two his temperature was back to a normal 98.6 degrees.

The technique used in the Children's Hospital operation was developed by Dr. Henry Swan and Dr. Robert W. Virtue, of the University of Colorado School of Medicine, pioneers in the United States in the use of hypothermia in heart operations. In the last three or four years, several variations have been tried successfully and experiments are still under way to improve and simplify the procedure.

In the special field of surgery on the inside of the heart, hypothermia is not the only avenue being explored. The work of Dr. John H. Gibbon, Jr., at Jefferson Medical College of Philadelphia, on a mechanical heart and lung that can perform the function of the human organs has shown promising results. When perfected, it will make operations on the inside of the heart possible without hypothermia.

The U. S. National Heart Institute at Bethesda, Maryland, and other medical institutions are experimenting with various kinds of heart pumps. Within the past year a "cross-circulation" method was developed at the University of Minnesota that has permitted operations to correct septal defects, or openings in the interior walls of the heart. The circulatory system of the patient was linked by means of plastic tubes to that of a healthy donor, carefully matched as to

(Continued on p. 20.)

STERILITY IN MEN

FERDINAND WELEBIR, M.D., F.A.C.S.

MANY a childless couple spend time and money in professional fees trying to discover why a wife cannot become a mother, when all too often the cause of sterility rests with the husband rather than with the wife Specialists in the study of fertility and sterility are stressing the fact that both husband and wife should be investigated before a childless couple give up on the problem and adopt a child. The importance of this plan is borne out by the fact that forty per cent of childless marriages today are so because the husband, not the wife, is sterile

The prime reason the husband is not studied more carefully is that he frequently *considers himself* above reproach, and not to be considered with regard to sterility After all, he is a healthy and vigorous-appearing male, and surely he should be able to procreate a child The suggestion of an examination by a specialist in this field is almost an affront to his manhood and his sense of superiority over the female

Countless wives are incorrectly called sterile and their lives filled with sadness and remorse, when actually their husbands are sterile And they may have a type of sterility that would respond to treatment Yet they go through life ignorant of this fact Many a husband, convinced that false pride and shame have no place in the study of sterility, has come to the happy knowledge that the examination of a man is much less time consuming than the examination of a woman. A sterility study should be made first on the husband, and next on the wife

Sterility, as every doctor knows, may range from a hereditary factor such as a one-child family background to a metabolic disease, which may be anything from overweight to diabetes

The endocrines, those mysterious glands secreting the hormones that control body functions and especially sexual and reproductive organs, also come into play in the field of sterility in both the male and the female

Mechanical factors may date back to a venereal disease, or childhood mumps may account for a low sperm count or total absence of sperm in the male And of course the emotional factor—that great question mark of all delicate problems having to do with reproduction—must always be taken *into account*

What can a man do if he suspects sterility, and what steps will the doctor probably take in diagnosing his case? Although every physician will handle each case of sterility on an individual basis, there are certain steps you can take to bring yourself into better health Then there are steps your physician must help you with

Of course the first step will be a complete physical examination, with a careful history, and some laboratory studies made by the doctor He will discover whether you are overweight and in need of a reducing diet, or underweight and in need of extra calories and more vitamins in your food He will check the blood for anæmia and correct it with proper diet and medication If he finds diabetes, he will institute a good programme to correct it, including diet and possibly insulin

Maintain good general health, and many of your difficulties will take care of themselves.

For the consolation of diabetics it is well known that, once regulated, a diabetic has an improvement in the spermatozoon count

Among the laboratory tests will probably be a basal metabolism check to discover whether thyroid extract will be of help in bringing up the sperm count In some instances, thyroid may be given to temporarily stimulate the sperm-secreting glands of the male

Interestingly, certain Oriental tribes gathered kelp to feed their infertile women They did not know the scientific reason for kelp improving the fertility of their women, but it is well known that kelp contains iodine, and doctors may use iodine when they note a deficiency These women perhaps had a low thyroid function and needed iodine

Another important little gland is the pituitary, in the centre of the skull It is actually the orchestra leader of all the hormone glands This gland, which influences the thyroid, adrenals, and testicles in the male, plays an important stimulative role in reproduction In some instances a pituitary-like hormone called gonadotropin may be found useful in some patients

In other patients a depressing action of the male hormone testosterone, may sometimes be used to produce the so-called rebound effect When this hormone is used it depresses the testicular production of sperm, and then with its sudden withdrawal the testicle may "bounce back," to produce a higher level of sperm. Although report of the success of this type

of therapy is still small, it is nonetheless worth a trial in certain selected cases Small dosage by your doctor of a medicine having estrogenic activity, possibly with treatment as long as six months, will often bring the count to the normal threshold

It has recently been shown that the liver has quite a function to play in the metabolism of body hormones Unless the liver is in good condition, metabolism may be so altered that the production of sperm will be impaired Avoid any poor diet that would cause liver trouble Anyone on a sterility programme should have plenty of vitamin B complex, carbohydrates, and protein foods to fortify the liver and prevent the interference of a diseased liver (cutting down normal pituitary-testicular hormone action) Alcohol and any faddist diet that may be short on vitamins should be eliminated Tea, coffee, and tobacco may have little direct effect on the production of spermatozoa, but many authorities advise total abstinence from these stimulants Also eliminate any drugs unless specifically ordered by the physician Include additional rest and moderate exercise in the daily programme

Sex relations should be regulated in such a manner that the sperm will have adequate time to accumulate and mature in sufficient numbers to produce fertilization And the optimum time for intercourse can be determined by a gynæcologist or physician by taking accurate temperatures and noting when there is an elevation, which indicates ovulation

Emotional factors, worries, tensions, and troubles should be eliminated from the family life as much as possible Many a young secretary living under the tension and turmoil of a busy office finds that the strain taxes her physically When removed from the tight schedules to the quiet environment of a country home, where she can rest and relax in the fresh air out of doors, walk, play, and take sunbaths, she has an improvement of general health including fertility Even so may the male correct his sterility by cutting down his tensions and emotional troubles It is well known that the endocrine system is easily tipped out of balance by emotional tension To bring it back into normal function we must eliminate any factors that would be likely to cause nervousness and worry

In young boys one of the complications of high fevers occurring during formative years—from age of ten to puberty—is to produce serility Mumps, when confined to the glands of the neck, does not cause sterility, but when it involves the testicles, with marked swelling and compression of the glands, it can cause sterility in the man in later years

Among the venereal diseases, gonorrhœa and syphilis are noted for causing sterility in both men and women In the man a plastic operation is sometimes necessary to open up the channel through which the sperm passes, and by-pass the obstruction Although the operation is a delicate and intricate one, the good results warrant an attempt in selected cases

Sterility sometimes is due to a congenital condition such as stricture of the urethra, which may require stretching, or to some other on to discover the cause of these childless marriages

If you have a sterility problem in your home, consult your physician and place yourself in his hands so that he can give you the best possible chance for having a child to make your home happy The old adage is altogether true "If at first you don't succeed, try, try again" This is the advice of every sterility specialist Success often comes with perseverance

physician makes a careful study for abnormal forms

Sterility is a complex and difficult problem, but a sperm count can quickly determine the state of man's potential fertility

One of the great mysteries today is how an infertile marriage can finally produce a normal child after the adoption of a baby Often a husband and wife separating in divorce can produce normal pregnancies in new marriages Although it may appear that these problems have their roots in the psychological make-up of the marriage partners, doctors are not satisfied to accept this explanation More and more research is going disease of the generative tract in the male

The urological surgeon will be able to examine any sterile husband and discover conditions that can be corrected surgically or, when necessary, medically, with such treatments as prostatic massage or measures to clear up urinary tract infection Or he can look into a partial impotence

One of the most important examinations the physician will make is a semen study The specimen is collected according to directions, and is examined within one hour The sperm is readily counted under a microscope. The normal specimen should contain sixty million to ninety-five million sperm per cubic centimetre The

COLD CAN SAVE YOUR LIFE

(Continued from p 17)

blood type, while both were under anæsthesia The donor's heart, aided by a booster pump, maintained circulation for both individuals while the patient's heart was clamped off Meanwhile, the defective heart was opened and the hole in the inner wall was repaired

Surgery on the inside of the heart is only a small part of the field in which hypothermia is now and potentially useful Dr Robert D Dripps, professor of anæsthesiology at the University of Pennsylvania School of Medicine, points out that hypothermia has been employed in various types of operations on the brain, including removal of tumours, and on the liver and other organs where bleeding hampers the surgeon and the circulation at normal temperature can be stopped for only a limited period It has been used effectively in treatment of peritonitis, abnormal activity of the thyroid gland, unusually high fevers, for amputations and the setting of broken limbs New applications of the technique are reported in almost every issue of various medical journals Possibly its widest use eventually may prove to be as an anæsthetic, because hypothermia reduces the amount of anæsthetic drugs required for an operation

"All anæsthetic drugs," he explains, "are a strain on various vital organs, often a greater strain than the operation itself To some degree, the strain varies according to the individual's tolerance, but to a much greater degree it varies in direct proportion to the amount of drugs needed to induce and maintain a state of anæsthesia Thus drugs are used sparingly, to minimise nausea, vomiting and other untoward effects that so frequently follow operations

"Moderate degrees of hypothermia, however, appear to put much less of a strain on a patient His appreciation of pain and reaction to surgical manipulation are greatly reduced Hypothermia makes it possible to cut down the use of anæsthetic drugs to the brief period required to reduce the patient's temperature to the level at which cold can serve as a drugless anæsthetic "

Doctor Dripps believes that hypothermia has thus brought within the range of surgical help many thousands of middle-aged and elderly

sick people who in the past have been considered inoperable or, at best, poor risks, because of their years of weakened physical condition The chances of many in this increasingly large group surviving an operation under anæsthetic drugs frequently have not been considered good enough to warrant the attempt With the new technique however, only a small amount of anæsthetic drugs is needed 'The prospects that these poor risk patients will have a safe and speedy recovery," Doctor Dripps says, 'are greatly enhanced by the use of hypothermia "

War veterans already are benefiting from adoption of the new technique by the U S Veterans Administration Many veterans of World War II are already in their forties, while World War I veterans are in their fifties and sixties a small but growing proportion entering the poor risk category Introduced by Doctor Swan, a consultant to the Veterans Administration Hospital at Denver, hypothermia was used first for heart surgery, later for operations on the large blood vessels and now is applied on a broader scale in eight veterans' hospitals in various parts of the country

This does not mean that hypothermia is a simple, foolproof method to be applied indiscriminately Those who use it have given it careful study and experimented extensively on animals before attempting to apply it to human beings Fatalities have occurred although just how many of them could be attributable solely to the use of hypothermia is difficult to say In many of the early cases on record, the procedure was employed only as a last resort on hopeless cases, as far as ordinary methods were concerned

The principal hazard is a medical tongue twister ventricular fibrillation a condition in which the gradually slowing tempo of the heartbeat, as the body temperature declines, first becomes irregular and then suddenly stops The walls of both ventricles shiver, oscillating furiously between 200 and 300 times a minute, but so slight is their later motion that no effective pumping action results Blood pressure drops to zero and the circulation stops altogether Unless the fibrillation is halted within a few minutes and the heart's effective pumping action is restored, body tissues will be fatally starved for lack of even the meagre supply of oxygen they require The causes of this reaction are not fully known Certain chemical agents have shown an inhibitory effect, but if they do not prevent its occurence and electric shock treatment fails to correct it, probably the surest way to restore normal heart action is to rewarm the patient as quickly as possible

Ventricular fibrillation did not occur during the operation on either Johnny Brown or the 25 year old man In the latter case, however, a slight change in the electro cardiograph tracing was noted several times during the cooling process, a warning that an irregularity might occur Each time, preparations were made to replace the coolant with a warm solution, but it was discovered that the tracing returned to normal when the flow of fresh coolant was stopped The surgeons had intended to lower the man's temperature to 80 degrees, but decided under the circumstances that his individual tolerance had been reached at 86 degrees and, to be on the safe side, they went ahead at that temperature The six degree difference shortened the length of time the circulation to the brain could be interrupted, but the aorta was repaired well within the safety limit

The need for extensive research into the causes of ventricular fibrillation and many other physiological changes which cold brings about in the human body is stressed by Dr James Watt, director of the National Heart Institute, which is sponsoring research and clinical experiments at hospitals in various parts of the country

"Hypothermia has already indicated" Doctor Watt says, "that great opportunities lie ahead in this field of medicine Cautious experiments, first with animals and later with human beings, have achieved a workable procedure We need to learn much more than we know now, but as research broadens our understanding, hypothermia may prove to be an outstanding medical development of this decade "

Research resulting from the revival of interest in hypothermia in recent years has revealed that 150 years ago a Scottish physician, Dr James Currie, reported in a study of fevers that he had lowered the body temperature of a patient to 83 degrees by immersing him for a period of 45 minutes in a brine bath kept at 40 degrees Fahrenheit

About 100 years ago in London, Dr James Arnott was using ice packs to relieve the pain of patients suffering from cancer These and some later experiments in this field, however, were isolated incidents and were never seriously studied Some of them were not even known to Dr Temple Fay, when he devised a practical clinical method of inducing first local and later general hypothermia in the late 1930's He demonstrated the effectiveness of cold in relieving pain and showed that the human body could tolerate moderate degrees of cold for as long as five or six days

Doctor Fay and Dr Lawrence W. Smith, both then at Temple University School of Medicine, based their experiments on the fact that cancers occur mostly in the body and head, much less frequently in the hands and feet Reasoning that the slightly lower temperature of the extremities might be the cause of this difference, they exposed chick embryos to cold and found that low temperature impaired and sometimes distorted cellular growth They proceeded to experiments with local chilling on several patients suffering from cancer in advanced stages, most of them in such pain that morphine offered only partial relief

Doctor Fay designed a capsule that could be inserted into a cancerous mass and kept at a constant temperature of about 34 degrees by a continuous flow of ice water The results were surprising and almost immediate The pain disappeared and narcotics were no longer required Moreover, the cancer shrank noticeably, to half its former size in some cases, and maintained its reduced mass while the capsule was in place Later, Doctors Fay and Smith tried cooling the entire body and obtained the same beneficial results The patients experienced no harmful effects even when kept in this state of "artificial hibernation," as the doctors termed it, for several days

Carefully refraining from any claim of a cancer cure, since the cold inhibited the cancerous growth only temporarily, Doctors Fay and Smith nevertheless suggested the use of cold therapy in conjunction with other forms of cancer treatment Cold's capacity for alleviating pain, they said, was in itself sufficient basis for further investigation

The report presented by Doctors Fay and Smith in 1939 created widespread interest and led to further experiments both in this country and abroad *Hypothermia received* another major impetus from Dr W G Bigelow, of the department of surgery at the University of Toronto Speaking before the American Surgical Association in 1950, he reported that in experiments on dogs under hypothermia, circulation of blood to the brain had been interrupted for as long as fifteen minutes without harmful effect, since they returned to a normal, healthy life afterward Doctor Bigelow felt the scope of surgery had been broadened not only in respect to the heart and large blood vessels but also in many other directions How closely his forecast approached reality has been shown by subsequent developments

As research and practice gradually extend the limits of our knowledge of this new procedure, a comparison of hypothermia produced artificially in the clinic and the natural phenomenon known as hibernation may be pertinent There are only a few true hibernators the hamster, some species of ground squirrels, the dormouse, hedgehog, ground hog or woodchuck, opossum, bat and the poorwill, a bird found in the mountains of Colorado Some authorities include the racoon, skunk and badger in the list

In many respects, the physiological reactions of hibernation and hypothermia are markedly similar The body temperature falls and the heartbeat respiration and demand for oxygen decline in the hibernating animal as they do in humans, although to a much lower level, and rise again as the temperature returns to normal Dr Paul O Chatfield, of the U S National Institute of Neurological Diseases and Blindness, and Dr Charles P Lyman, of the Harvard Medical School, who have been studying hibernation for several years, are more interested in the differences between hypothermia and hibernation and the reasons for them Hibernation seems to be a voluntary act Of a group of hamsters turned into a cage kept at forty degrees, some will hibernate immediately, some in a day or two and some not at all Man and other non hibernators, of course, cannot will themselves into a state of hypothermia

A much more important difference, however, is the mysterious capacity of the hamster, for example, to withstand body temperatures as low as 34 degrees, while another rodent, the rat which does not hibernate, dies at 50 degrees Does the hibernating animal secrete some hormone or chemical agent which protects it while its non hibernating cousin succumbs to the cold

Doctors Chatfield and Lyman would like to know If hibernating animals do store up some such bodily secretion which could be isolated and produced synthetically, it might be a distinct contribution to the technique of hypothermia This as yet is an unanswerable question.

HOMEMAKERS' HELPS

RECIPES

Cauliflower and Egg

One head cauliflower, 1/4 cup grated cheese; finely grated onion; 2 eggs, beaten; salt.

Cook cauliflower florets until almost tender, do not over cook Beat up eggs, salt, and add grated cheese, if available, and onion. Dip cauliflower in egg mixture and fry on both sides until golden brown

Cauliflower a La Romana

One head cauliflower; 1 small clove garlic; 3 tablespoonfuls oil; 1/2 teaspoonful salt; 1/2 cup tomato juice; chopped parsley.

Saute garlic in oil until browned, then remove from oil Saute cauliflower until browned Add salt and tomatoes, cover and simmer 2 minutes. Arrange in serving dish, sprinkle with parsley and grated cheese if desired

Baked Onions

Twelve medium onions; 3 tablespoonfuls flour; 2 cups milk; 1 cup sour cream; salt.

Slowly simmer sour cream in skillet until fat separates and the residue is a light brown Drain off fat Add flour to the sour cream residue and mix well Add milk and salt and boil well, stirring constantly until thick Peel onions and place in baking dish Cover with gravy mixture and bake one to one and half hours in moderate oven Onions may also be baked in tomato sauce

Baked Zuccini Slices

One large zuccini or egg-plant; 1 egg; basin or flour; salt.

Beat egg and salt slightly. Dip 1/2 inch thick slices of zuccini into egg, then into basin (or flour) and place on well-oiled baking sheet Bake in moderate oven until tender and brown, turning once and adding a little oil if necessary Serve with tomato sauce

Delicious Fried Cabbage

One small cabbage; 3 eggs beaten; oil; juice of 1/2 lemon; salt.

Cut cabbage quite fine and fry in small amount of oil and salt until quite tender (it should not lose its colour) Add lemon juice when almost done Then quickly stir in the eggs When eggs are cooked, serve immediately

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"All should be acquainted with the special value of fruits and vegetables fresh from the orchard and garden"

Honey Glazed Carrots

One pound carrots; 2 tablespoonfuls honey or sugar; 1 tablespoonful fat; 1/2 teaspoonful grated orange rind; salt.

Cook carrots, cut in half, in small amount of water until tender Bring honey, fat, salt and orange rind to boil in skillet Add carrots and simmer 10 minutes

Okra with Cornmeal

One pound okra; 1 tablespoonful fat; salt; 1 large onion, minced; 1/2 cup cornmeal.

Wash and dry okra, cut in pieces like string beans. Fry okra and onion for a few minutes. Add cornmeal and salt. Mix and fry until tender.

Okra

One rounded tablespoonful fat; 1 lb. okra, cut in 1/2-in. pieces, 1 medium onion; 1 1/4 teaspoonfuls salt; 1/2 teaspoonful jira; 1/4 teaspoonful haldi.

Wash okra, dry with towel and cut Mince onion Put half onion with okra and fry other half until medium brown. Add jira and fry one more minute Add okra and onion mixture salt and haldi Cook over medium heat, stirring once or twice to prevent sticking Cook 15 minutes For variation, when adding the okra and onion also add 1/2 cup tomato juice

Baked Okra

One pound okra; 1 egg; 1 cup bread crumbs; 2 cups tomato juice; salt.

Cook okra in as little water as possible Drain, mix with beaten egg and salt Line the bottom of a greased baking dish with half the crumbs Place okra over crumbs, add tomatoes and cover with remaining crumbs Bake in moderate oven 30 minutes

Okra with Tomato

One pound okra; 1 medium onion, diced; 1 tablespoonful fat, 1 cup tomato juice; salt.

Fry onion in fat, add okra, which has been washed and cut in small pieces, and continue frying until onion begins to brown slightly Add salt and tomato juice and simmer over low heat until tender

Summer Squashes

The various summer squashes may be steamed unpeeled and seasoned with butter or cream They may be cooked with tomato and onion similar to the okra recipe above, or they may be baked in the oven in a tightly covered dish with a little water and seasoned with butter, cream, or tomato juice.

KIDDIES' KORNER

DISAPPEARING JERPIE

MRS JOHN F UNDERHILL

"BUT Mother, we've looked and looked We just couldn't find her," declared Sharene as she sank wearily into the depths of the big chair on the porch "We followed her away out in the woods," said Russi, who had parked himself on the steps. "And then—she just disappeared!"

Mother set two glasses of fruit juice on the stand as she said, "You did your best, I am sure No doubt she has a nest hidden out there I surely hope nothing happens to her Perhaps I shouldn't feel the way I do about her After all, Jerpie is just another chicken But she has an independent toss of her head and a peculiar wild look in her eyes that have always intrigued me"

"If you ask me," said Sharene, "I doubt whether we ever find out where she hides She is so wild and crazy I think she has gone native!"

For several days it was the same During the day old Jerpie remained out of sight Then at feeding time she would come dashing out of the woods She ruffled her feathers and made queer noises in her throat as she mingled with the other chickens in the feeding lot. Then when she had finished her supper, back again she would go to the woods

One evening Russi and Sharene watched her carefully When she had finished eating, she dusted herself in the ashes, shook out her feathers, flew up into the air several times, then settled down on the edge of the watering trough and took several swallows Then away she went toward the woods

"There she goes!" said Russi, jumping up and running after her "She won't give us the slip this time I'm going to stay right on her trail"

"I'm with you," said Sharene, throwing down the feed pan and running after him

Jerpie gave them a merry chase, but they kept close behind her Around stumps, rocks, and bushes she went, pausing now and then to pick up an insect or cricket or a bit of grass Around this tree and that tree she went, as if to lose her pursuers Sometimes she flew over the gooseberry bushes—sometimes she ducked under them

"Now watch her carefully," said Sharene "It is somewhere near here that we always lose her"

"I have my eyes on her," said Russi "Be careful, there's an old log behind this bush Don't trip over it"

"I'll be careful," said Sharene, stepping over a dead tree trunk that was lying across the path She nearly bumped into Russi, who had stopped suddenly

"Now where—She's gone!" said Russi, looking all around

"I thought you were keeping your eyes on her," chided Sharene "She must be hiding near here Let's look"

Behind trees, under bushes and clumps of weeds and sumac they searched, but they found no trace of Jerpie Baffled and discouraged, they wended their way back home to tell Mother that Jerpie had disappeared again

"I guess there is no use to follow her," said Mother "It must be that she has really 'gone native' as you said It's the call of the wild"

For about three weeks Jerpie came as usual at evening to claim her share of the grain the children put down for the chickens Then for two nights she did not appear

"I guess she is not coming any more" said Sharene

"Maybe a jackal got her," suggested Russi as he scattered the grain in the feeding lot, calling, "Come, chick, chick, chick, chick!" Then he stopped and pointed toward the woods

"Look, Sharene! It's Jerpie! And look what she has with her"

Very proudly Jerpie was walking toward the feeding lot—her head held high, her wild eyes staring as she turned from side to side, clucking for her babies to follow

They came tripping along behind her, seven, eight, nine, ten, eleven little Jerpies, each with that same proud lift of the head and the peculiar wild look in the eyes—exactly like their mother!

"She built her nest out in the woods," said Sharene, "just as Mother said Now she is bringing her family home"

"Mother should see *this*," said Russi, and away he ran to get her

For several minutes Mother and the children stood by the feeding lot watching Jerpie instructing her babies in the art of scratching and picking up bits of grain that she found for them They had a lesson,

too, in drinking from the low watering pan.

Mother brought out some ground corn and oatmeal for the baby chicks, but Jerpie paid no attention to it. She gave her head an independent toss as if to say, "I am well able to take care of my family without help from anyone, thank you!" and away she went, calling her chickens to eat only what she scratched up for them Then suddenly, out toward the woods she went, with her eleven little Jerpies following behind

"I am just curious," said Mother "Let's follow her and see where she takes them" And away they went with Jerpie in the lead

"We surely can't lose her this time," said Margaret "There must be some kind of nest"

"With empty shells," added Russi

But when they came to that certain place in the woods, presto! Jerpie and the eleven little Jerpies vanished They were gone!

"Listen," said Mother "Maybe we can hear them" But even though they stood very still and strained their ears they could hear no sound of baby chicks Only the familiar night sounds of birds and crickets could be heard From afar in the distance a cow mooed, a cicada trilled out his rolling song, then all was still

"That's the strangest thing," said Mother "Jerpie has certainly gone native, and her children are as wild as jungle chickens We might as well go home Evidently she does not intend for anyone to discover her hiding place"

For several weeks it was the same. Each evening Jerpie brought her little family to the feeding lot They ate the grain, drank from the trough, then disappeared into the woods.

"I saw some wild geese flying south this morning," remarked Russi "It will soon be too cold for them to sleep in the woods The nights are getting chilly"

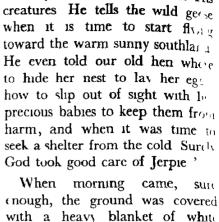
"Perhaps Jerpie will also have a good solution for that problem," said Sharene

And sure enough, she had! One evening about sundown, as Russi and Sharene were feeding the chickens, Jerpie came as usual with her eleven half-grown children to eat a hearty supper and drink from the water trough Then, instead of going back to the woods, Jerpie went into the chicken coop, called to her chickens, then went up, up on the roost, clear to the very top One by one the chickens followed her, balancing with their little gray wings until they, too, reached the top roost And there they settled down in a row beside Jerpie, their eyes staring curiously down to the floor beneath them This was a new experience, but being obedient children, they followed the instruction of their mother without a question

"Mother will have to come out and see this," said Russi as he went to the house to get her

"Now I've seen everything!" said Mother as she saw Jerpie and the eleven little Jerpies sitting in a row on the top roost

"But how did *she* know there is supposed to be a big frost tonight?" asked Sharene "She didn't hear the weather report!"

Mother replied, "It only proves beyond a doubt that there is a

loving heavenly Father who tenderly watches over all of His creatures He tells the wild geese when it is time to start flying toward the warm sunny southland He even told our old hen where to hide her nest to lay her eggs how to slip out of sight with her precious babies to keep them from harm, and when it was time to seek a shelter from the cold Surely God took good care of Jerpie"

When morning came, sure enough, the ground was covered with a heavy blanket of white frost Sharene and Russi went to give the chickens their breakfast Jerpie and her family mingled with the other chickens as though they had always belonged

"I wonder if she will go back to the woods tonight?" asked Sharene

"Let's watch and see," said Russi

But Jerpie and the eleven little Jerpies seemed to be quite satisfied They remained with the flock

One day during cold weather Russi and Sharene were out in the woods gathering dry wood for the fireplace

"Help me lift this log, will you, Sharene? It seems to be frozen down"

"I'll push these weeds away first," said Sharene, tugging at the end of the log with mittened hands At last it loosened with a jerk and rolled over, splitting apart leaving a chunk of bark frozen to the ground Sharene stooped down to examine a queer mass of twigs gray feathers, and bits of broken eggshells

"Russi!" she called, "Jerpie's nest! It was inside this log that we almost stumbled over a dozen times"

"So that was where she laid her eggs and hatched her babies! It must have been God who told her where to hide her nest, for nobody —not even we nor the jackals—could find it God surely took good care of old Jerpie"

?

PIMPLES: Ques.—"How may I permanently stop the growth of pimples on my face I am a young girl and greatly embarrased by this growth By these pimples my skin is being made rough. There are red and black spots on my face. How can I get back my fair and clear skin? What do you suggest as being the best help?"

Ans —To get rid of the pimples observe the following rules
(1) Do not squeeze, pinch, or pick the pimples (2) Wash the entire body, especially the face frequently using anti-septic soap such as Cinthol prepared by Godrej. (3) Wash scalp frequently and the face at least four times a day using hot water and Cinthol soap allowing the lather to remain for several minutes, then rinse first with hot and then with cold water (4) After this has been done massage lesions firmly but gently between thumb and finger to express excess sebum, rinsing face again with warm and cold water Hot steamed towels placed on the face will help to soften the follicular plugs After washing face in the morning you may apply an Astringent Lotion of 2 5% Salicylic Acid in Alcohol

Do not use greasy preparations on the skin Do not use sugar or fats in the diet Some people are allergic to such foods as milk, eggs, wheat, nuts chocolate, bananas, tomatoes, onions and citrus fruits You might try eliminating these one by one from your diet to see if they are responsible in part for your condition Many young girls your age have this trouble, which usually clears up when they are a little older

?

ASTHMA Ques —"I am suffering from Asthma for the past ten years because of which I have lost vigour and energy as well as appetite Every month I badly suffer from crucial cough associated with bronchial tendency and feet swelling Please inform me whether any change of climate at present is required

Ans.—People with Asthma are many times relieved by moving to a different climate It might well be worth your while to go to some dry area for a time to see if the Asthma would disappear One of the most effective treatments, which we know, is the use of the Nefrin Inhaler. This instrument costs Rs. 50 and may be

1 This question and answer service is free only to regular subscribers.

2 No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases.

3 All questions must be addressed to The Doctor Says Correspondence personally with the doctor is not available through this service

4 Questions to which personal answers are desired must be accompanied by ADDRESSED AND STAMPED ENVELOPES Answers cannot be expected under ONE MONTH

5 Questions sent in on Post Cards will not receive attention

6 Make questions short and to the point Type them or write them very clearly

7 Questions and answers will be published only if they are of such a nature as to be of general interest and without objection, but no names will be published Address "The Doctor Says" Oriental Watchman and Herald of Health P O Box 35, Poona 1

ordered from the S D A Hospital, Athwa Lines, Surat, or the Simla Sanitarium, Carton House, Simla-4 For diet you should eat only fruit for a time and if the Asthma disappears gradually add other food substances until you find out what aggravates your condition, and what you can take without Asthmatic response A food that causes Asthma in one person may not cause it in another The only way to find it is by experiment

?

EXCESSIVE WEIGHT Ques —"I shall be grateful if you will advise me how to get rid of the extra fat from which my wife and I suffer I am 52 and my wife is 50 My weight is 205 pounds and my wife's 240 pounds I do not have any trouble so far except that I cannot work hard and walk long My wife is suffering from slight Diabetes, headache and nervous break down of a mild nature sometime "

Ans —You are well advised to go on a strict weight-reducing programme, as excessive weight not only shortens a person's life by a number of years, but also makes him more susceptible to a great number of diseases such as diabetes, arthritis, heart and kidney disease, and even cancer.

The main cause for too much weight is too much food. You must drastically decrease the intake of starches and sweets, but you must continue to take an adequate amount of protein, mineral and vitamin containing foods. While reducing it would be well for you and your wife to take some good Multi-vitamin capsules daily.

If you are not engaged in physical labour of some kind along with your other work, I would suggest that you go on a 1,200 calorie diet and your wife on a 800 calorie diet You should eat only twice or three times daily with nothing between meals, except water and fruit juice without sugar Eat the largest meal in the morning and take no food within five hours of going to bed Do not rest after eating, but take light exercises If you sleep with a full stomach, the food after eating is stored, whereas if you take your largest meal after getting up in the morning, the energy is used in activity and not stored You will feel better and will not put on weight Be sure to take mild exercise each day after eating, go to bed early and have a good night's sleep

?

EXCESSIVE SWEATING Ques —"What does the excessive rather abnormal sweating of the body in general and of arm pits, palms of hands and soles of feet in particular in young men indicate in hot weather? What are the natural or artificial but harmless means to reduce the sweating to normal?"

Ans —Hyper hydrosis may accompany certain systemic diseases such as tuberculosis, Anæmia Diabetes or Hyper-thyroidism, being over-weight or having a glandular disfunction, or being abnormally nervous However, most probably the cause in a healthy young man aside from the heat and humidity is a lack of sufficient salt in the diet

Treatment consists in eliminating or treating the underlying disease if present, the use of Alcohol sponge Potassium Permanganate baths, or such astringent powders as those containing Tannic Acid, Zinc Oxide and Talc. In severe cases difficult to control, a doctor may administer Atrophine

?

LEUCODERMA: Ques.—"On my left leg there are two white marks (one, 1 square inch and the other,

¼ square inch) and also there is a small white mark The hair is also white in those places These marks are spreading year by year Please inform me about the treatment"

Ans—The white marks of which you complain are probably what is called Leucoderma This is not a dangerous affliction You could purchase some Leudermol and rub on twice daily This has proved effective in many cases in restoring the pigment to the diseased areas of the skin

?

BODY ODOUR Ques—"My brother's body has the intolerable odour of aloes No amount or kind of soap helps Please advise the treatment"

Ans —I would suggest that your brother change his diet, and use Cinthol soap for bathing to see if this might change the intolerable odour of which you speak

WORLD'S LARGEST HEALTH AGENCY

(Continued from p 2)

Regional Offices

Within the first year of its operations, WHO regional offices took over the duties of directing the health work of large areas

The first regional office was set up in 1949 in New Delhi to serve South-East Asia The same year the Pan-American Sanitary Bureau, with headquarters in Washington, D C, began to function as the WHO regional office for the Americas, and a regional office was established in Alexandria, Egypt, for the Mediterranean region

Other regional offices include a European office in Geneva, Switzerland, an African office at Brazzaville, French Equatorial Africa, and a Pacific office at Manila, in the Philippine Islands

The WHO is supported by contributions made by the member nations

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AMBITION AND BLOOD PRESSURE

(Continued from p 11)

son I'm tired now " A good night's rest gives you the strength to fit the pieces of the jigsaw of life into place without too much tension

4 Develop a sense of self-confidence How do you know you're not as good as the other fellow? How do you know you can't do a certain thing? Do a lot of things, do them to the best of your ability, do them for the fun of it -simply jump in and do them—and you'll succeed in many things This four-square attitude will develop self-confidence

5 Have faith in God Build that faith by prayer, studying your Bible, going to church, singing hymns, asking the blessing before each and every meal Let it be a lifebuoy for you when the sea of life is stormy Fanny Crosby, one of the greatest hymn writers, was blind Her songs express the finest emotions of love and contentment for simply being in God's world Look at some of her hymns occasionally as great poems of faith

High ambitions make us kneel at the feet of success William James, the outstanding American psychologist, called s u c c e s s a strange and cruel goddess Benjamin Franklin said that success has ruined many a man J u s t i n McCarthy, a noted English writer, said that in certain cases nothing fails like success Declare your independence of the tyrant success

Your high blood pressure can be a manifestation of your real self By positive thinking, by not reaching for the ultimate in material perfection, by remembering that the apostle Paul said, "I can do all things in Him who strengthens me," you can take life as it comes If you want to read more about this subject, please look at Paul's letter to the Philippians 4 11-13, Revised Standard Version Paul says some vivid things about this all-too-common tension and ambition

Don't let your inner tyrants continue to rule you and destroy you

---

YOUR MENTAL APPETITE

(Continued from p 7)

we see that character is the basis of vision

The third point is that vision is the basis of achievement Because a miner has an interest in silver, gold, sapphires or diamonds, he sees them and he gets them

Barney Barnato had the eye to see that down beneath the exploited and abandoned diamond mines of South Africa there were richer and rarer gems And it turned out that he was right So it is with people Those who see the most in us get the most out of us!

Vision is the basis of achievement The great achievements of all ages have been accomplished by men of vision. "Where there is no vision, the people perish" is an inspired comment. We must get our eyes on loftier ideals We must change our market cart for a chariot of the sun.

"Ask, and it shall be given you seek, and ye shall find; knock, and it shall be opened unto you: for every one that asketh receiveth and he that seeketh findeth, and to him that knocketh it shall be opened."

What do you hunger for? That is life's most vital question and you must answer it How will you answer life's greatest question? What do you really want?

PROTECT YOUR CHILD'S TEETH

(Continued from p 9)

agreed that cleaning with a brush should begin when a child is two Most youngsters are eager to copy everything they see, including the process of brushing teeth, if Daddy and Mother observe this after-every-meal ritual Buy your child a brush and let him go to it He may be awkward at first, but he will learn

Although brushing is not a guarantee against dental decay, it does help to remove food particles upon which bacteria live If bacterial action and the decay that results from it can be limited greater dental health will be the reward

Dental decay is primarily a disease of early childhood and adolescence In rapidly growing children a visit to the dentist every six months may not be often enough Dental decay can appear suddenly and in numerous areas and repair must be made as quickly as possible When a child is four or five, an examination every three or four months may be necessary to save teeth that may be lost entirely if the interval between

examinations is too long

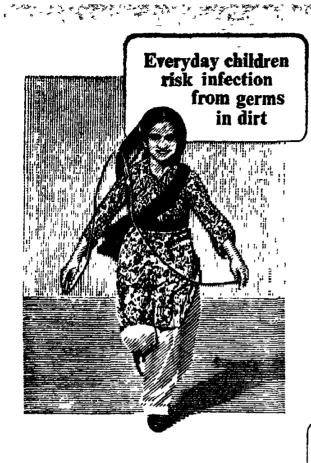
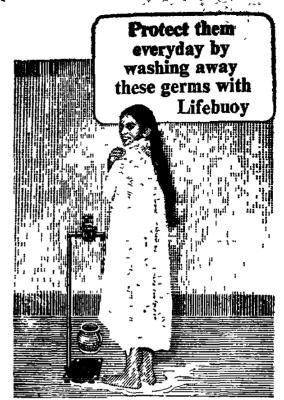
Some parents seem to think that there is no need to repair baby teeth, for they will soon be replaced. This is wrong Nature needs every tooth to protect the symmetry of the jaw until the permanent tooth appears. This is a long process, because not all the baby teeth are shed until nearly the age of twelve years If baby teeth decay and are lost, the space required for permanent teeth is changed Often this results in crowding of the teeth, malformation of the permanent arch, and poor co-ordination of the teeth A few measures of precaution are important

Decay of baby teeth can endanger the second teeth, which become infected The process then becomes a progressive condition, threatening every tooth in the mouth.

It has been proved time and again that a reduction of free sugar, such as sticky candy, heavily sugared pastries, and white bread, definitely decreases the rate of decay progress in the young The acid-producing bacteria that live on fermentable carbohydrates lodged between the teeth have much less chance to grow when such foods are restricted It is a good rule to insist that your children always brush their teeth directly after eating, particularly of sweets

In a two-year study reported in the *Journal of the American Dental Association* on the school children in two different cities, scientific data revealed the effectiveness of good oral hygiene and the use of an ammoniated dentifrice Children aged ten and eleven were selected because these are the ages most susceptible to tooth decay The children were divided into four groups Three different types of tooth powder were used in each of the first three groups One group used a powder containing no diammonium phosphate, or urea; the next two groups each used an ammoniated dentifrice of a slightly different formula These three groups brushed their teeth twice daily, at school under teacher supervision as well as at home The fourth, or control, group, did not brush their teeth at school, but followed their own routine habits at home

At the end of the two-year period when the first three groups were compared with the fourth it was found that those using the ammoniated dentifrice and brushing their teeth at school had a 20 per cent reduction in decay The results indicate that when good oral hygiene is supplemented with an ammoniated dentifrice, there will be less decay than would otherwise occur

Proper care of children's teeth also involves the care of tonsils and

adenoids Diseased tonsils and adenoids may cause mouth breathing, which often distorts the jaw Such disturbances can result in crooked teeth, infection of the mouth, tooth decay, and a destruction of facial beauty. A visit to your doctor for a check on the health of tonsils and adenoids once a year is advisable

Poor oral and dental hygiene can be detrimental to both general health and the teeth, it can also be expensive Maybe every family could adopt the motto, "Be true to your teeth, and they won't be false to you"

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ORIENTAL WATCHMAN
NOVEMBER SUPPLEMENT 1955

A Faith That Works

HERBERT P FORD

FOG closed around the plane In the cockpit a worried pilot was having a radio conversation with flight-control personnel at Tempelhof Airport in Berlin, Germany

"Hello, Tempelhof, hello, Tempelhof, this is Air Force 113 Do you read me? This is Air Force 113 Do you read me? Over"

From the plane's radio receiver sputtered the anonymous voice of Tempelhof Airport

"Hello, Air Force 113 This is Tempelhof tower We read you Over"

From Tempelhof came the reply that fog was thick over the runways It was bad flying weather

The pilot in the cockpit of Air Force 113 had expected clear weather at the Berlin airfield He hadn't expected to be forced into a dangerous landing

"Hello, Tempelhof," called the pilot, "this is Air Force 113 We carry a Priority I cargo May we use G C A" This stood for Ground Control Approach landing system Were the field's G C A facilities working? Would a G C A landing work in this thick fog?

Quickly the men at Tempelhof asked themselves these questions G C A consisted of several men in a little house far out on the runways In front of radar screens these men watched aeroplanes approach the airfield, and they talked to the pilots by radio, telling them when to turn, when to climb, when to descend

The flight-control men called the G C A building Were the radar screens working? Was everything ready for a controlled landing?

Assured that everything was in order, the Tempelhof tower men radioed to the pilot again and said that he could use G C A for his landing

Now the mysterious radar became the pilot's eyes In the G C A building a man picked up Air Force 113 on the radar screens He watched the plane swing closer to the air field Then he spoke

"Hello, Air Force 113 This is Tempelhof G C A As I talk you down, you must follow each instruction I give you If my voice stops for more than ten seconds climb immediately to your present altitude Is that clear?"

The pilot answered that he understood the instructions

What followed was a great act of faith When the controller said to turn, the pilot turned the plane, when he said to climb, the pilot sent the plane into a climb Each time the controller spoke, the pilot obeyed instantly

Soon the controller said to the pilot of Air Force 113 "Cut your power You are on the runway"

Even as the words were spoken the pilot cut his engines His plane rolled smoothly down the wide, safe runway of Tempelhof Airport The plane, pilot crew, and precious cargo were safe

For some years now I have remembered that experience I was aboard that aeroplane on that foggy day high over Germany and I remember the faith that our pilot had in each word the controller spoke to him

There are two important things about faith which ought to be understood one is communication, the other, examination For a Christian, communication is prayer, and examination is study of the Bible Used in the following five ways, these will give faith as surely as there is a God and it will be a faith that works

1 Read your Bible daily

2 Pray daily

3 Believe what you read Weigh each thought carefully, see how you can use it Pray with a purpose in mind

4 Form definite convictions from your prayers and Bible study Stick to these convictions

5 Apply those convictions to the way you live

In other words, believe God is guiding your life, and follow His instructions Such a faith will bring you a safe and happy landing

YOU AND THE BOOK

THE VICTORY OF FAITH

ALMA L TIBBS

1. Ecclesiastes 7 29—God placed an upright man upon the earth
   "Lo, this only have I found, that God hath made man upright"

2 Genesis 3 8—The first man's instruction was personally directed by his Creator
   "And they heard the voice of the Lord God walking in the garden in the cool of the day"

3 Genesis 3 2, 3—As long as man believed God, he enjoyed the beauties of Eden and communion with his Creator
   "And the woman said unto the serpent, We may eat of the fruit of the trees of the garden but of the fruit of the tree which is in the midst of the garden God hath said, Ye shall not eat of it, neither shall ye touch it, lest ye die"

4 Genesis 3 6—When doubt replaced faith, man yielded to the deceiver
   "And when the woman saw that the tree was good for food and that it was pleasant to the eyes, she took of the fruit thereof, and did eat, and gave also unto her husband, and he did eat"

5 2 Peter 2 19—This lack of faith brought him into bondage
   "For of whom a man is overcome, of the same is he brought in bondage"

6. Hebrews 2 14, 15—Jesus came to earth to deliver man from this bondage
   "Forasmuch then as the children are partakers of flesh and blood He also Himself likewise took part of the same, that through death He might destroy him that had the power of death, that is, the devil, and deliver them who through fear of death were all their life time subject to bondage"

7 James 2 18—Faith is shown by the attitude we take toward God's commands.
   'Yea, a man may say, Thou hast faith, and I have works show me thy faith without thy works, and I will show thee my faith by my works"

8 Hebrews 4 2—The gospel is powerless to one who has no faith
   "For unto us was the gospel preached, as well as unto them but the word preached did not profit them, not being mixed with faith in them that heard it"

9 2 Peter 1 5—Faith is the foundation of Christian experience
   "And beside this, giving all diligence, add to your faith virtue, and to virtue knowledge"

10 Hebrews 11 4—Abel's faith made his sacrifice more excellent than Cain's
   "By faith Abel offered unto God a more excellent sacrifice than Cain by which he obtained witness that he was righteous"

11 Matthew 9 29—God works for man in proportion to his faith
   "According to your faith be it unto you"

12 Hebrews 11 29—The faith of the Israelites made a path through the sea
   By faith they passed through the Red Sea as by dry land which the Egyptians assaying to do were drowned"

13 Joshua 3 15, 16—The Jordan divided at the march of faith
   "And as they that bare the ark were come unto Jordan, and the feet of the priests that bare the ark were dipped in the brim of the water, that the waters which came down from above stood and rose up upon an heap very far from the city Adam and those that came down toward the sea of the plain, even the Salt Sea, failed, and were cut off and the people passed over right against Jericho'

14 Daniel 6 23—Daniel's faith locked the lions' jaws
   "So Daniel was taken up out of the den, and no manner or hurt was found upon him, because he believed in his God"

15 Job 13 15—Job's faith made him willing to suffer for God
   "Though He slay me, yet will I trust in Him"

16 Hebrews 12 2—Jesus' faith made Him victorious in His battle with sin
   "Looking unto Jesus the Author and Finisher of our faith, who for the joy that was set before Him endured the cross, despising the shame, and is set down at the right hand of the throne of God'

17 1 John 5 4—Faith will give victory to every believer
   "For whatsoever is born of God overcometh the world and this is the victory that overcometh the world, even our faith"

18 2 Chronicles 20 20—Faith will give stability and prosperity
   "Believe in the Lord your God, so shall ye be established, believe His prophets, so shall ye prosper"

REMEMBER THY CREATOR

DONALD A WEBSTER

I TOOK my college work in a co educational institution Every morning we would meet in the chapel for worship, and one of the students would conduct the meeting One day the dean of men, who was in charge of the morning services, asked me to give a talk in about six weeks time, and I consented In the ensuing weeks I dismissed the appointment completely from my mind

One morning some weeks later, while waiting for worship to begin, I noticed that the seat next to the dean's was vacant The blood suddenly surged through my body with fright "Could it be," I asked myself, "that it is my turn to conduct worship?" I was soon to have an answer to my question, for at that moment the dean announced that I would speak Stumbling forward nervously, amidst quite audible laughter from the other students who realized my plight, I mumbled a few words and sat down I discovered that the fruit of forgetfulness is great embarrassment I was ashamed

We humans are prone to forget easily Children forget their home duties Wives forget their husband's birthdays and husbands their wedding anniversaries Most of us at some time have forgotten to meet an appointment And who hasn't forgotten the answer to an examination question?

Because of our forgetfulness, we need to be reminded If we fear forgetting something we had better write it down where it cannot be forgotten Some even suggest tying a piece of string around the little finger But then, those who do usually forget why the string was there!

Most people have found that the best method for remembering is by association—associating the thing or fact to be remembered with some thing familiar Also by repetition—repeating it over and over until it becomes a definite part of one These two methods combined form the surest way of retaining a fact

In the beginning, when God created this world, He foresaw man's forgetfulness With this in mind He instituted the Sabbath to remind man always that God is his creator

"God blessed the seventh day, and sanctified it because that in it He had rested from all His work which God created and made " Genesis 2 3

Again, "Remember the Sabbath day, to keep it holy Why? Because "in six days the Lord made heaven and earth, the sea, and all that in them is, and rested the seventh day wherefore the Lord blessed the Sabbath day, and hallowed it " Exodus 20 8 11

God gave man the Sabbath that by association and repetition he would remember Him By keeping it holy he would learn to associate the Sabbath (which means 'rest") with God, who alone can give rest to a troubled heart By repetition, keeping holy *every* seventh day of *every* week, God and His rest would become a definite part of his life The individual who experiences these two results of Sabbath keeping will never forget God

If man had always remembered the Sabbath, there would be no evolutionists, for the Sabbath is a memorial of creation Those people who no longer love God first neglected to keep the Sabbath, for those who forget the Sabbath will automatically forget God

Many young people today have forgotten God, or they have given Him the back seat in their lives They are rushing forward so fast and foolishly that they never take time to look back to consult the One who alone has a right to their lives

If youth had only remembered the Sabbath, there would be no frustrated individuals there would be no juvenile delinquents there would be no drunkards and dope addicts All would enjoy the rest and peace of mind promised to those who remember God

God says to youth, "My son, forget not My law, but let thine heart keep My commandments for length of days and long life, and peace, shall they add to thee " Proverbs 3 1, 2

The city was twenty seven miles west of the college Two friends and I had spent the day shopping and sight seeing in town At approximately five o'clock we suddenly came to the realization that none of us could remember what time our train left After a few moments' deep thought, however, one of us finally said the time of departure was six thirty

At six fifteen thinking we had ample time to board our train, we ambled onto the station platform only to discover that the train had gone at five thirty We had missed the train because we had forgotten

This was not the worst thing that could have happened, however, for we caught a train an hour later But those who forget God, who are not ready when Jesus comes to take the faithful home, will not have another opportunity Their only chance will have passed They will be lost eternally

"Remember now thy Creator in the days of thy youth, while the evil days come not, nor the years draw nigh, when thou shalt say, I have no pleasure in them " Ecclesiastes 12 1

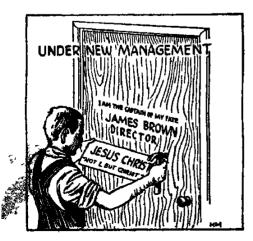
"A PIECE OF GOD"

ROSE BENNINGTON

WHEN someone hurts us, our first impulse usually is to strike back We feel the urge to hurt that person even more than he has hurt us If he has inflicted bodily harm, we are not satisfied until we have floored him for the count If unkind words have wounded us, then our impulse is to strike back with harsher words of our own

I say "we," for this seems to be a common fault; it is a practice many indulge in, in spite of the instructions given by Jesus, "If anyone strikes you on the right cheek, turn to him the other also, and if anyone would sue you and take your coat, let him have your cloak as well, and if any one forces you to go one mile, go with him two miles " Matthew 5 39 41, R S V

Jesus practised what He preached He did not strike back even when He knew that Judas was going to betray Him He forgave completely and then said, "What you are going to do, do quickly "

When Peter said to Jesus, 'I will lay down my life for You," Jesus regarded him with compassion and answered softly, 'Will you lay down your life for me? Truly, truly, I say to you, the cock will not crow, till you have denied Me three times " No h a r s h words no denunciation Instead He gave consolation "Let not your hearts be troubled' John 13 37, 38, 14 1, R S V

This world would be a wonderful place to live in if only we all followed the teaching and example of Jesus "A soft answer turns away wrath,' we are told, and common sense affirms this statement. Harsh words have nothing to sustain them when soft answers take away their power to hurt Cruel, cutting remarks invariably fall flat under such treatment

This truth was driven home to me recently I was spending what started out to be a pleasant afternoon with friends, when suddenly the atmosphere changed One of the women present had taken exception to a chance remark of another, and instantly her remarks became personal and pointed The other, not to be outdone, met her halfway, and soon the discussion, which had started out to be friendly, got completely out of hand The hostess was uncomfortable, and so were the rest of us

Strain and tension were thick in the room, when the front door opened and the four year old daughter of the hostess slipped inside She shut the door and stood quietly, a pool of water forming at her feet She was drenched to the skin

When she informed her mother that Jimmy had turned the hose on her, the woman, whose patience was already worn thin, leaped to her feet A deep frown formed on her brow, and an angry, unbecoming flush coloured her face

"That boy next door needs a thrashing!" she burst out crossly "I'm going over this very minute to give his mother a piece of my mind!"

The little girl shook her head By this time her lips were almost blue from the cold "Oh, no momie," she said "Not a piece of your mind! Jimmy won't do it again I gave him a piece of God "

An odd stillness settled over the room The mother looked at her little girl and then, without a word, took her by the hand and led her from the room

All strain and tension had miraculously vanished Finally one of the warring friends spoke to the other Tears were shining in her eyes and her voice broke as she, with all animosity forgotten, said, "Isn't she a darling youngster?"

That experience was almost too beautiful to talk about There wasn't a woman in the room who hadn't actually felt the presence of God I am positive that each one took home "a piece of God" that day I know I did

A piece of God, indeed! How wonderful it would be if every one of us paid back insults and fancied slights with this gift! When the harassed store clerk makes a mistake in our change and then acts surly when we call his attention to it, when the thoughtless tale-bearer brings news to anger us and deflate our ego, when cross words from a loved one tempt us to retaliate—then, if we could but reach down in the full ness of our heart and give that person the greatest of all gifts—a piece of God!

INFALLIBLE CHOICE

Bert Morehouse

The Creator
needed someone to take care
of His human children
with selfless love,
gallant courage,
and patient understanding,
so He gave each one of us
a mother.

ATOMS FOR PEACE

Above: Prime Minister Nehru shown visiting the exhibition when it opened in New Delhi.

Below: One of the sixty-five pictorial panels, many with flashing light display, showing startling progress made with atomic materials which are featured in the largest and most colourful show ever organized in India to illustrate the peaceful uses of atomic energy which is now on tour throughout the country The exhibition is non-technical in presentation and occupies about one tenth of an acre of floor space depicting all phases of atomic energy development It contains miniature working models, Geiger counters, atomic reactor and atomic power plants which are designed to give vivid impression of the practical use of the various forms of atomic energy in power production, medicine agriculture and in other fields

The Oriental Watchman and Herald of

Health

A Magazine [illegible]

December

1955

Up-to the-Minute Articles

Interest For

Fathers

Mothers

Boys and Girls

Students

Everybody

ATOMS OF FERTILITY

A. BUYANOV, *Engineer*

WHEN science made atomic energy available for productive uses, Soviet agriculturists were not long in pressing it into service for investigation in and solution of practical problems of farm production

The energy of uranium atoms consists mainly of thermal energy, and partially of radioactive radiation. Thermal energy has a wide range of application. For one thing it can be used directly on the farms, as, for example, for growing vegetables and fruits in the winter. It can also be converted into electricity. But altogether boundless prospects are opening up for the use of radioactive radiation.

In contrast to ordinary atoms radioactive ones emit particles or beams which though invisible to the eye are readily detected by special instruments called counters or photo plates in liquids, gases, solids, in the bodies of plants or animals. These are the tracer atoms.

TRACER ATOMS IN THE STUDY OF PLANT BIOLOGY

The hitherto accepted theory of the mechanism of photosynthesis the process of assimilation by plants of carbon dioxide under the action of sunlight, has now been proved to be wrong. Using radioactive carbon Academician A. P. Vinogradov, has shown that carbon dioxide assimilation takes place not only in light, but in darkness as well. In the presence of ferments it combines with the restorative substances of the cells forming complex oxidizing substances and acids, and the latter subsequently in light produce sugar starch and cellulose. Due to chlorophyll the oxidizing substances give out oxygen and are again converted into restorative substances. The use of heavy oxygen has made it possible to establish that the oxygen put out by plants in the process of photosynthesis is liberated not from the carbon dioxide as has been believed hitherto, but from the water, and the hydrogen of the water is used for the restoration of the carbon dioxide.

Through the aid of radioactive carbon and heavy nitrogen Soviet scientists have succeeded in learning that in photosynthesis not only carbohydrates are formed in plant leaves, as was formerly held but also proteins. It appears that carbohydrates are synthesized chiefly in the yellow red rays and proteins in the blue rays. Knowing this it is possible in hot houses, for instance to regulate the spectral composition of light and thus direct the plants and accumulate in them the more desirable products.

By his experiments with tracer atoms Academician A. L. Kursanov has discovered that the roots absorb carbon dioxide from the soil and send it up to the leaves and other green parts of the plants where soil carbon dioxide together with the carbon dioxide absorbed from the air is used for synthesizing carbohydrates, proteins and other organic substances.

Academician Kursanov's discovery of the additional source of carbon nourishment for plants is of immense practical importance. It makes possible to intensify the feeding of plants with its basic nourishing substance—carbon dioxide—by regulating the microbiological processes in the soil humus. All this holds out the promise of a great increase in the yields of agricultural products.

Professor A. V. Sokolov has likewise applied the method of tracer atoms to the solution of vital problems of plant nourishment.

HOW PLANTS ARE NOURISHED

If plants receive their nourishment in time and in required quantity they develop well and yield a rich harvest. Up till not so long ago, however it was impossible to find out how the atoms of the nourishing substance move through the plant. This has been made possible by radioactive atoms.

In order to find out how tomatoes for example, absorb phosphorous fertiliser containing radioactive phosphorous is placed in the soil around the roots. After a while when a sufficient amount of the radioactive substance has accumulated in the tomato fruit it is picked off and sliced. A sensitive photofilm is placed almost close to a slice of the tomato and is kept long enough for the radiation emitted by the phosphorous to leave its mark on it. At the spots of the tomato which contain the largest number of radioactive atoms the film will be very dark, while at the spots containing no phosphorous it will remain transparent.

More than thirty Soviet scientific institutions carried out experiments with tracer superphosphate in 1954. By these experiments the most favourable methods and time of depositing phosphorous fertilisers under various farm crops have been determined.

Maize, as tracer atom experiments have shown, best assimilates phosphorous fertilisers in its early vegetation period whereas potatoes take their required phosphorous continually.

Soviet scientist I. V. Yakushkin has applied non-root nourishment of plants in practical farming. He has found that if the leaves of sugar beet are sprayed with certain chemical substances such top dressing increases the sugar content of the beets by two to three per cent. In the USSR this would produce additionally hundreds of thousands of poods of sugar per year from the same area under this crop.

(Continued on p. 30.)

Contents

December 1955

L J LARSON, M A, B Sc, Editor

DUNBAR SMITH, M D, D N B, D T M & H (LOND) Associate Editor

J B OLIVER, M D, D T M Associate Editor

OUR COVER

"Like these cool lilies may our lives remain,
Perfect and pure, and know not any stain"
—Andrew Lang, *A Vow to Heavenly Venus*

B Rangarathan

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Minute Meditations

THE LAWS OF HAPPINESS

Alfred Kam

MEDICAL scientists say that an understanding friend to whom you can tell your troubles and a sense of humour contribute a great deal to happy living

A happy life is a quiet life. Parenthood provides the greatest happiness life has to offer. Children's needs draw you out of yourself and give you something important to live for.

When you let your interests be wide and your reactions to things and persons be friendly, you enjoy happiness

Being happy, you will be a pleasant companion.

To like yourself and other people is one of the greatest of all sources of happiness. You cannot be happy if you lack self-respect, and others are not drawn to you if you dislike them

Man finds his happiest fulfilment in his greatest sacrifice. You find a great joy in life when you live so as to be of real value to the world. Interest in your work and looking upon it as a service to many people makes you happy

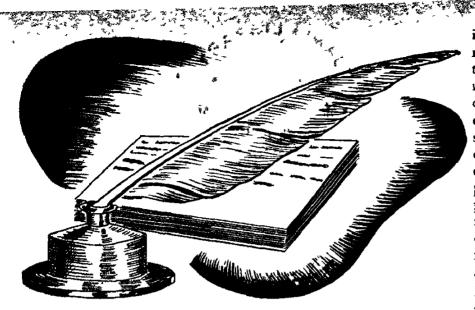
An old Dutch proverb says: "Happy people are never wicked"

Happy people have opened the door of their hearts to the beauty of the world and the joy of human relations

Abraham Lincoln said: "Most folks are about as happy as they make up their minds to be."

We ensure happiness by training ourselves to be happy in spite of what life does to us.

Not events and the things you see and enjoy produce happiness, but a state of mind that you control by your thinking. Psychiatrists tell us to think positive thoughts and avoid negative ones

(Continued on p 5)

THE EDITOR SAYS

ONE OF our regular readers sent me the following little verse the other day and I desire at this time to share it with you

"When a plumber makes a mistake, he charges twice for it
When a lawyer makes a mistake, he has a chance to try the case again
When a doctor makes a mistake, he buries it
When a judge makes a mistake, it becomes the law of the land
When a preacher makes a mistake, nobody knows the difference
BUT when the editor makes a mistake
Good night!"

Anon

I don't know just what made this friend send this particular verse, because we had not made any particularly bad mistakes in our magazine for some time But I guess he thought it would be a good thing for the editor to have on his desk and the editor has had it there where he could look at it every day! But, even though the editor had this verse on his desk, apparently, it should have been on some other desks also!!

It's a sad fact that whenever a mistake is made in a publication, whether it is an error in fact, or press work, or an error in spelling, or just a simple matter like a whole column of an article being all messed up, the editor always gets the blame—and so my excuse for writing this to you today

I am surely certain that *the one article* that the majority of our readers read or perhaps I should say, had tried to read, in the month of November was that article which we published on pages 18 and 19 of the November issue of this magazine dealing with 'Sterility in Men' Now, the article is one for which no apologies need to be made It is a good article I know Dr Welebir personally He is a good doctor, and more than that, he is an authority on the subject he has written about But unfortunately a mistake, and a very serious mistake, was made in the publication of his article

The printing of a magazine is a very complicated process After the material has been collected, it has to be read through very carefully and all the necessary corrections made before it is sent to the composing room where the Intertype operators set it up for the magazine Then all the material the Intertype men have composed is put on a small press and a proof is printed The proof readers read this proof very carefully comparing it with the original copy They check for every possible type of error that may have crept in and send it back again to the Intertype operator He makes the necessary corrections Another proof is printed which is again sent to the proof readers and they again read it very carefully to see that all the corrections have been made and to make sure that they didn't miss anything the first time This procedure is continued until there are no more errors to be found and corrected Then the matter is made up into pages, and just to be sure that no mistakes have crept in and nothing has been left out and that nothing has been put in the wrong place, these pages are read again by the proof readers and sometimes read again and again until everything is just as it should be

This was all done on the November issue of the *Herald of Health*, but somehow, between the time when the pages were last checked and the time when those pages were put on the press to be printed, something happened and the entire last column on page 19 was printed in a most disgraceful manner Your editor has made many inquiries to try to find just what happened, but so far as we have been able to ascertain, nobody even touched that particular column!!

Now, if we were down in the south of the United States where there are many superstitious people someone would say that the Pixies had done it The Pixies are a mythical folk They are pranksters and jokesters of the land of the fairies and are supposed to play little tricks, sometimes good, sometimes bad, but always in such a way that nobody ever knows, as the saying goes down there, "who done it!"

Since we are in India and we don't have any Pixies out here, the

only thing your editor can figure out is that somebody "done it" and just isn't man enough to admit it because it is a most disgraceful thing that has happened We at the Publishing House are all ashamed of this blot upon our otherwise fair face for November We do hope that our readers will accept this our apology for something that has happened which was beyond the control of the editorial office, and will not hold this very very evident mistake too critically against us. The whole article is *there, but it* is worse than a jig-saw puzzle to

(Continued on p 24)

The Laws of Happiness

(Continued from p 3)

in order to be happy. The power of our thoughts is tremendous, and it shapes our lives. Happy people have fewer auto accidents than unhappy ones The emotion an event inspires in you is more important than what happens.

Women have a greater capacity for happiness or unhappiness than men.

We keep happy when we expect and tolerate unreasonableness in other people.

The great philosopher Benedict Spinoza was one of the happiest of men in spite of illness, persecution, and poverty. He looked at his troubles with the perspective of eternity

Happiness comes from sharing with others and contributing to their happiness, without seeking always a response. A keen wish for recompense from others causes unhappiness You cannot depend on others for happiness and not be disappointed

Emerson said: "Happiness is a perfume which you cannot pour on others without getting some on yourself."

In order to have happiness within, you have to love more than you are loved and give more than you receive.

Marcus Aurelius said. "Remember that very little is needed to make a happy life."

WHAT'S IN THE NEWS?

South Africa's gold output last year was Rs 2190 million

* * * *

Every week Parke, Davis and Company use 18,000 large, white fertile eggs in the production of influenza vaccine

* * * *

The effect of weather and motor traffic vibration has begun to tell on Rome's fourth century Arch of Constantine Still one of the best preserved structures of the imperial period, it is now wearing scaffolding as workmen endeavour to halt disintegration which has unloosed chunks of stone and marble

* *

A new power generating device about as large as a water glass yet capable of producing about 850 jet horsepower has been developed by the U S General Electric Company It is called a "gas generator"

Using no moving parts, the gas generator converts liquid hydrogen peroxide into a high pressure, high temperature gas stream of free oxygen and steam This gas stream, or jet, may then be directed against a turbine wheel and the rotative power thus generated can be used in the same manner as any turbine generated power

* * * *

An inexpensive fibre building board made from wood has been developed by the U S Department of Agriculture's Forest Products Laboratory in Madison, Wisconsin Called "diffusion board," the material is now in limited commercial production for shelter purposes According to the Agriculture Department the diffusion board looks much like ordinary fibre board now widely used in house construction Chemicals in it screen out deadly gases and harmful particles Life-sustaining oxygen passes through it, and carbon dioxide gas given off in breathing can pass in the opposite direction Any species of wood can be pulped to make diffusion board the Agriculture Department said

* * * *

Two new drugs, said to be "three or four times more potent than cortisone in treating arthritis and having less side effects, were recently described to the American Rheumatism Association They are called metacortandralone and metacortandracin, and were developed by the Schering Corporation of Bloomfield New Jersey

The excellent results obtained on one patient after three months of treatment were demonstrated in a motion picture It showed how extremely limited and painful motions of arms and legs had been restored to normal The dosage of the new drugs is "much less" than that of cortisone—in some cases only one tenth as much This greatly reduces side effects

* * * *

Electronic mothballs" are now being used to prevent the formation of rust on United States merchant ships that are inactive and are anchored for long periods of time in various rivers and harbours

Actually, the "mothballs" are a method of electronic cathodic protection Inactive ships are attacked by corrosion caused by a reaction between the metal of the hull and salt water The electric cathode system offsets this natural process by causing a submerged metal anchor to corrode instead of the ship's hull

The ship forms one electrode in an electric circuit, and the anchor forms the other electrode Direct electric current passing between the anchor and the ship sets up an electro-chemical reaction which rusts the anchor instead of the ship

SECRETS OF CHRONIC ILLNESS

Sought at U. S. Health Centre

IN A pleasant park in Bethesda, Maryland, just outside Washington, D C, there is a new and unique hospital

Its patients get the best in medical care, but treatment of the sick is not the reason for which it was built

No other hospital is harder to get into, yet its patients suffer from only a limited variety of common diseases and some are not sick at all

No fees are charged, yet patients probably get studied more thoroughly than anywhere else in the world by the widest array of scientists, doctors and technicians ever assembled

Opened by the U S Public Health Service in 1953 at a cost of $64,000,000, this unusual hospital is the clinical portion of the most intensive medical research operation in the United States, a sort of medical "Manhattan District" (the original project under which the Atom bomb was developed)

After World War II many people insisted that since the U S government had successfully mobilized brains and billions of dollars to make an atom bomb, it should then focus its vast resources on finding ways to save mankind from the menace of cancer, heart disease, arthritis and other grave illnesses

In 1947 the U S Congress approved a long-range programme which made available many additional millions of dollars to the U S Public Health Service for medical research About two thirds of the appropriated monies allotted to non-governmental institutes, supports between twenty and twenty-five per cent of all medical research undertaken in the U S The balance is being spent at the Clinical Centre and seven National Health Institutes at Bethesda

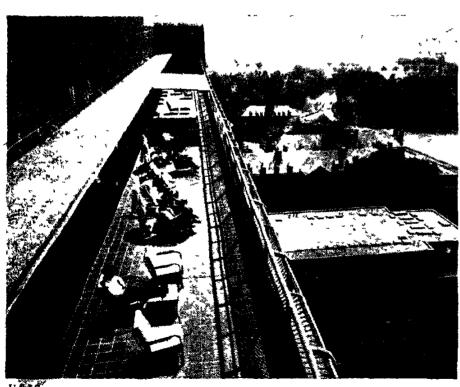
In the past, U S Public Health doctors investigated such scourges as cholera, typhoid, typhus, and yellow fever

But following victories over these diseases new health problems arose For as infectious disease rates fell people lived longer and chronic ailments began to take their toll

Heart disease, cancer, kidney disease, diabetes and a fearsome train of other chronic illnesses now kill nearly a million Americans each year

To solve the problems of these diseases Congress established in the 1930s and 1940s seven research health institutes at Bethesda These were the Institutes of Cancer Arthritis and Metabolic Diseases Dental Research, Mental Health and Neurological Diseases and Blindness and the Division of Research Grants

Institute scientists, however soon found that they were hampered by an inability to carry their laboratory findings through to clinical evaluation since unlike their predecessors who had rushed to the scenes of epidemics, they had no patients to study.

So it was decided to bring patients to the researchers and thus

U.S.I.S. Numerous facilities are provided for the comfort and morale of patients who often remain for many months at the Clinical Centre. Here patients sit out on the sun deck adjacent to the laboratory buildings.

the Clinical centre came into being

Described as "a set of laboratories wrapped around a hospital," the new 14-floor clinic was designed "to put medicine back together again"—to reassemble physicians, biochemists, nutritionists, physiologists, organic chemists, pathologists and many other experts for a combined assault on disease

Each institute has patient quarters, nursing services and clinical laboratories along adjoining corridors on the same floor Thus the scientists who deal directly with the patients are only a few steps from their area

Scientists from the same institute but not directly concerned with the patients have laboratories on the wings of the same floors Under this arrangement basic research scientists and clinicians, who at most institutions never see each other, are able to work in close proximity.

Two times as much space is devoted to laboratories (there are 1,100 in the building) as to patients, the reverse of the ratio found in most hospitals

One of the Clinic's proudest possessions is a 3,000,000-volt Van De Graaf generator recently donated by a tobacco company The 30-ton apparatus, the most powerful of its kind, will be used for research on the radio-chemical and biological effects of X-rays and electronic energy

USIS

Not all the patients at the Clinic are sick Each day Lowell Burnett, a volunteer in good health, drinks an excess of water and then walks a treadmill so that doctors can learn how a normal person's body gets rid of water, in relation to how a fat person's body gets rid of it

Everything has been done to make the patients' quarters comfortable There are no wards Instead patients live in double rooms furnished with beds which can be converted into studio couches and other homelike accessories designed to make them look as unhospital-like as possible Sundecks, a gym, library, theatre and chapel are among the many other facilities provided for the patients

The staff includes some of the finest scientists in America who have been attracted to the Clinic by the excellent facilities, the chance to work and exchange ideas with outstanding specialists, and complete freedom to carry on their research in any manner they desire Many scientists, such as the $35,000-a-year researcher who recently quit his job with private industry to join the Institutes at a salary of $15,000, sacrifice higher paying jobs for the opportunity to work at the Clinic

Under a visiting scientist programme, doctors and specialists from all over the world have been invited to the Institutes to advise and assist the staff on various research projects

A visitor to the Clinic is immediately impressed by the spirit of excitement which pervades the institution Laboratory lights blaze late at night as researchers pore over slides and test tubes Everybody seems to be involved in a vital research project Even the janitors experiment with new mixtures of floor wax

Staff members agree that the most important persons at the Clinic are the patients

The Centre's scientists have definite programmes of research They decide which aspects of each disease they are going to study

(Continued on p 20)

FOMENTATIONS

OWEN S. PARRETT, M.D.

WHEN Johnnie gets a pain in his tummy on the right side and rather low down, Mother hurries him to the doctor's office. "I was afraid it might be his appendix, so I did not give him a cathartic or apply heat." Everybody seems to know that much about medicine Some people know that a small ice bag fits nicely over a "hot" appendix, and using it this way is a safe procedure. For disease in general, though, just where, when and how do you use heat, when do you use cold and when do you combine the two in some way?

Here are two wonderful healing agents—heat and cold They are inexpensive, they are safe. With a little instruction in their use, Mother can be a successful home nurse In choosing a nurse most children will vote for Mom and even Dad appreciates help from that quarter Where pain is involved because of inflammation, such as in pleurisy or lumbago, we use heat only, for cold may make the pain worse.

Any sprained joint, such as an ankle or a knee, is quickly improved by the application of alternate hot and cold Use long hot applications and short cold ones, repeating the cycle once a minute for twenty minutes A foot or hand may be dipped alternately in hot and cold water Other parts are best treated by fomentations wrung from hot water, or compresses wrung from cold water They fit almost any surface

No method of applying heat gets better results than a hot fomentation with its penetrating steam It must be so hot as to scarcely be borne Flip it up a time or two if too hot, until it is bearable or lay a dry, thin tea towel next to the skin Keep the skin dry by repeated rubbing with a dry towel beneath the fomentation cloths Never, never let the patient become chilled and always finish off with a quick alcohol rub, always leaving the patient dry and warm An old woollen blanket cut into four parts makes the best fomentation cloths, but two large turkish towels will do

If possible, have a heating unit beside the very ill patient's bed, in order to assure the greatest efficiency and have the fomentations as hot as possible Place the cloths folded into small squares in a basin of boiling water, bubbling on the stove or hot plate Place a light towel and one of the woollen cloths on the patient's chest or other part to be treated, and cover him with the bed blanket, working quickly so as to avoid exposing him to room temperature

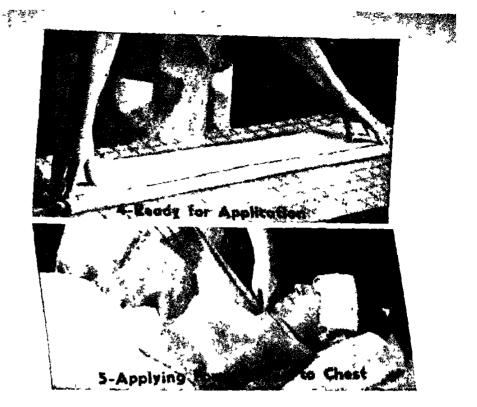
With a long-handled fork, pick out one of the boiling fomentation cloths, handling carefully so as to keep it folded as completely as possible, and place it on a towel on your work table Fold the two sides of the towel over it quickly, pick up the ends of the towel, and twist them and pull them to wring out the fomentation cloth

When you have wrung as much water as possible from the cloth, open the towel quickly and place the hot cloth on the cloth covering the patient at the site of treatment Fold the covering cloth around the hot cloth, place a clean, dry towel over it and cover the patient with the bed blanket Avoid creating gusts of wind as you handle the blankets

Never apply the wet fomentation cloth to the skin. There must be a thin towel next to the skin and a covering cloth over it The cold compress is simply a small, thick, folded towel or washcloth dipped in water containing ice cubes and squeezed until it does not drip Keep the patient warm and carefully covered throughout the treatment Put him in bed and cover him warmly after the treatment is finished

For Johnnie's sore throat this works wonders Put his feet in hot water, give the hot-and-cold treatment to his throat and neck four to six times, and finally apply a wrung-out ice-cold cloth to the front of his neck Cover this cold cloth completely with one of Dad's heavy woollen, dry socks, wrapping it entirely around his neck, covering the damp cloth and pinning it snugly This is to be worn all night or changed every four or five hours in the daytime It is called a cold heating compress Never, never let Johnnie become exposed or chilled when a heating compress is in place Keep him in bed warmly covered

Instead of taking a sleeping pill try a couple of fomentations to the spine For this purpose you need not have them quite so hot and each one may be left on a little longer than usual Use no cold here, only hot or very warm Finish with a massage to the spine or a light stroking of the back downward, topping it off with a little alcohol There is absolutely no bad hang-over with this naturally induced sleep and it is definitely not habit forming A natural sleep is far better than a drugged sleep

What good are fomentations? What do they do? How do they act? First, they relieve pain They relax muscle spasm, as in treatment for polio, where the spastic factor may prove injurious They tend to reduce congestion in inflamed tissues and re-distribute the blood supply They improve sluggish circulation in organs lying underneath the surface treated They improve glandular activity, as in the stomach when digestion is improved and colicky spasm is relieved

4-Ready for Application

5-Applying [illegible] to Chest

Because the healing of any diseased or injured tissue is dependent on a vigorous blood supply, sprains as well as fractures may be made to heal faster when heat is used or heat and cold alternately I know of no drug that can do this job as well Even in angina pectoris attacks, heat applied to the chest may often greatly lessen the pain and relax the spasm of the coronary arteries For angina pectoris you may not use cold, for you want only the relaxing effects of heat For a boil or a carbuncle, hot and cold will quickly bring it to a head and help it to discharge and heal up Sometimes a migraine headache may be eased by the application of alternate hot and cold over the head and face A hot foot bath at the same time helps draw the blood from the congested vessels in the brain During this treatment a towel may be wrung from ice water and wrapped around the neck As a result, the blood going to the brain will be diminished No drug can compete with this simple treatment in controlling the distribution of the blood At the same time the system is better off, for it is not doped with pain drugs Where pain drugs are necessary, smaller doses will suffice

In skin eruptions and blemishes such as acne the daily application of hot and cold followed by massage will greatly aid in restoring normal skin tone and resistance against infection of all kinds

There are many diseases for which we may not have a specific treatment or medicine A good example is infectious hepatitis, which involves the liver and causes severe jaundice But even in this disease, alternating hot and cold applications over the liver area (low on the ribs, right side) twice daily for twenty minutes seems to hasten the recovery from this disease

The next time you find yourself suffering pain from a sprained joint or infected hand or foot, don't forget that the simple application of heat and cold will greatly lessen the pain and hasten the healing

YOUR BRAIN—

God's Masterpiece

LESTER H. LONERGAN, M.D

THERE is great value in natural remedies in the achievement of buoyant health Often simply because we lack appreciation of the care required by the delicate machinery of our bodies we allow ourselves foolish habits that gradually detract from health reserves The intricate mechanism represented in that highest of all human faculties the mind deserves the best care we are capable of supplying

Up inside the skull, snugly protected like a walnut in its shell, are three pounds of tissue described as the capital of the body Here it is that we file our memories, trust our friends, build our dreams, and commune with our Maker

Proper use of this delicate organ in the sky room of the body is the great antidote for the foolish things we do In the mind are the control rooms from which "body tenders" supervise the timing of the heart-beat, the force of the blood pressure, the number of breaths we must take to keep the blood charged with life-giving oxygen From the marvellous gyroscopes that keep us upright and in balance, nerves speed signals to the master mariner, the cerebellum It constantly interprets their readings From the mind we command our feet to walk, our fingers to grasp, our eyes to note the lifting of an eyebrow or the hint of a smile From the higher portions of the mind we tell our tongues what to speak, and thus we censor what we say It is true of the entire body, but especially true of the brain, that "we are fearfully and wonderfully made"

But how is the brain constructed? How does it accomplish these many delicate tasks?

The highest part of the brain—the section above the eyebrows, the top of the ears, and the bump at the back of the head—looks very much like a huge walnut half, perched there with the flat side down It is divided again into two halves joined at the flat side, as is the nut half This portion of the brain is called the cerebrum Composing the outer portion of the cerebrum is a thin layer somewhat gray in colour The inside portion, which is by far the larger, is white

The microscope shows us that the white matter is made up of billions of nerves fibres—telegraph wires, as it were—that carry messages from the capital at the top to the substations farther down the line These fibres are white because they are covered with white insulation called myelin

The gray matter enlarged many times is seen to be composed of billions of nerve cells The mind is the actual place where we think, where we realize the meaning of the messages brought in over the "telegraph wires," and where decisions are made concerning them The cerebrum, then, is the home of the higher functions of the mind, such as the will, conscience, sensations, emotions, spiritual perceptions, and control of body motion

Does this mean that there are several larger departments of the brain, each controlling a certai kind of body activity?

Apparently so Just under th centre of the cerebrum in the bacl of the skull is the cerebellum, abou the size of an orange, having a accordion-pleated appearance, witl the pleats going crosswise This i the substation to which the body' gyroscopes send their messages Th cerebellum receives messages fron outposts in arms and legs, tellin where they are, and therefor notifying us of the body's position The cerebellum helps keep us i balance, and causes the muscles t work together as a well-drille team even in such complicate activities as walking or typing letter

In grammar school most of u learned that it takes an amazin number of muscles to enable u simply to stand upright Are ther yet other departments of the brain

There is one more major department of the brain Inside the skull connecting the cerebellum and th spinal cord, is the fascinating orga of the brain that regulates th vital processes of life It is calle the medulla Here are the executiv offices of physiology One regulate the pulse Another, on receivin distress signals from the stomach causes it to empty automaticall (often a life-saving process) On office controls the number of time we breathe Another causes th pupils of our eyes to contract i bright sunlight but widen in th dark, to gather in all the rays o light possible Without the medulla life could not exist

Your every action and sensation depends on your control centre —

YOUR WONDERFUL BRAIN

All of that in only three pounds of machinery! A woman canning apricots boiled some jars and lids in a shallow pan to sterilize them After filling a jar with fruit she thoughtlessly dipped into the pan for a lid with her bare fingers, but she surely didn't get very far Her hand was back out of the burning water before she knew what had happened An instant later it began to hurt Can we follow the nerve signals through that complicated process?

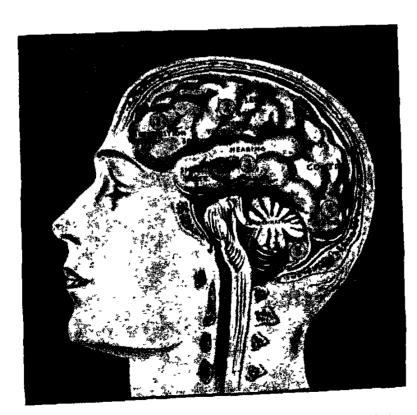
This woman's experience reveals one of the most intriguing safety devices of the body Here is what happened The instant her hand met the hot water, sensitive thermometers in the skin flashed a telegram over nerves to the spinal cord Inside the spinal cord, connection was made with other nerve cells, which sent a message to the muscles of the hand and arm immediately saying, "Pull out!" And out snapped her hand But that is only half the story When the message reached the spinal cord, the cells that handled it also relayed right on to the cerebellum the message "I am the hand I have been burned What are you going to do to relieve this pain?" This message went right on to the gray matter of the cerebrum, where she actually sensed the pain and burning and knew that she had been injured, but not until the hand had already been jerked from the water

Isn't it a wonderful provision that the foremen down in the spinal cord could provide immediate relief to the workmen, at the same time sending an account of the disaster to headquarters at a distance! The body has dozens of these safety devices which save us from countless falls, bruises, and injuries

What habits can we develop to protect this intricate nervous mechanism?

Habits that contribute to the health of one organ contribute also to the health of all other organs Just as the stomach needs five or six hours between meals to do its work efficiently and rest before the next meal, so the mind must have periods of rest You can do this best by centring your attention on different lines of thought, not following any one to the extreme But just as important as the avoidance of over-work, is the proper use of this control system, in order for us to think deeply and carefully, reasoning from cause to effect, and thus develop accuracy and precision

Another aid to mental efficiency too often neglected is exercise in the open air Getting a sufficient amount of rest each night in a well-ventilated sleeping room helps you spring out of bed in the morning with a clear, fresh mind and eager zest for living But keeping late hours is sure to depress the delicate cells with which we achieve fine distinctions of choice and discernment So too, doubt, worry, improper eating and other forms of self-indulgence, and the use of stimulants and narcotics corrode the delicate mechanism and sabotage it The greatest power to increase vigour of intellect and self-control, available to everyone, is a study of the Bible

(Continued on p 27)

Proper use of the delicate organ in the sky room of the body is the great antidote for the foolish things we do

EMOTIONS and your STOMACH

Edward Podolsky, M D

EMOTIONS have a great deal to do with how your stomach behaves Emotional disturbances such as frustration and anxiety often predispose to ulcer of the stomach It is believed that the emotional disturbance produces imbalance of the nerves that supply the blood vessels of the stomach Such imbalances decrease the blood supply of the stomach and an increase of hydrochloric acid in the stomach finally results in an ulcer

Drs. Harold G Wolff and Stewart Wolf have done much research on emotional upsets and stomach ulcers Here is how a stomach ulcer starts Emotional conflicts involving anxiety, resentment, or hostility are accompanied by an increase in the normal secretion of acid in the stomach There are also engorgement of the blood vessels in the stomach wall and vigorous contractions of the stomach

In the distended, stretched state of the membranes, the most trifling abrasions, such as those caused when the stomach contracts against rough food particles, may start tiny bleeding points The abnormally acid stomach juice irritates these tiny spots This irritation in turn brings about a still greater secretion of acid This causes still more engorgement of the membranes with blood Thus a vicious cycle gets down to business In the excess acid the pepsin in the stomach juice is able to digest out little areas of mucous membrane. These areas become chronic ulcers

The Drs Wolff and Wolf were able to make many observations on a man named Tom, who had a hole in his stomach They were able to study the effects of various emotions, on Tom's stomach On one occasion Tom was lying on the table while the doctors were studying the interior of his stomach Just then an official burst into the room to fire Tom, who had been a conscientious worker The situation caused strong resentment in Tom What happened to his stomach? It became red and heavily engorged with blood, its folds thick and heavy There was an increase in the acid Vigorous stomach contractions set in Tom was angry, and his stomach was showing it in no uncertain manner

At this point the official told Tom that he was only joking, and that in fact Tom was a fine man, a valuable worker, and still had his job Tom began to feel better, and so did his stomach The acid decreased, the blood lessened, and the stomach walls quieted down His stomach felt better

Stomach ulcers are more common among men than women There is a reason for this When a woman is angry, resentful, or frightened, her stomach turns pale, slows down, and produces less acid and digestive juice A man's stomach behaves exactly the opposite when he gets angry, resentful, or worried Therefore four times as many men as women get stomach ulcers

Drs Russel J Crider and Shepard M Walker had the opportunity of studying a woman's stomach An accident produced an opening in her stomach, and for the first time doctors were able to make such observations on the inside of a woman's stomach

Seeds for peptic ulcers and indigestion may be sown by a brutal boss or a marital mixup.

The woman was a twenty-one-year-old college student who swallowed lye by mistake The lye burnt her throat so that she could not swallow A hole had to be made in her stomach to feed her and keep her alive The opening, on her left side, was about three by five inches. She was enthusiastic at being able to help advance medical knowledge, though at times she was disgusted, sullen, and angry over what seemed neglect in her treatment When she was in the black moods the doctors discovered the difference in the behaviour of her stomach from the behaviour of men's stomachs in similar moods

Remember that your emotions have a great deal to do with how your stomach behaves. Frustration and anxiety often predispose to ulcer of the stomach.

The stomach ulcer patient is a distinct personality type Such persons usually show on the surface an emphatic activity, efficiency, and independence They are usually especially susceptible to threats to their security (including work and financial problems) or to the anxieties that come with authority They are always on the go, always under tension, always doing something, never slowing down.

Jim Haskins was a fifty-three-year-old janitor who for three years complained of digestive troubles He was found to have a stomach ulcer His symptoms developed after he lost his position as a mill worker and had been without steady employment for five years He divorced his wife when he was forty years old because he thought she was extravagant and got him into debt He was deeply concerned over money matters, took the possession of money seriously, and was excessively disturbed by his period of economic insecurity He gave the impression of being unstable, emotional, and fearful

Another patient was a fifty-year-old housewife. She had a bleeding stomach ulcer Her story revealed a life filled with difficulties, marital friction, and numerous problems in the behaviour of her five children Her stomach trouble began when her husband refused to have her old father in the house Then her father died Her ulcer began to bleed when one of her sons married and brought home a fifteen-year-old wife Later she was obliged to care for the wife and her month-old baby

There was a fifty-three-year-old woman who suffered for about ten years from bouts of indigestion and a stomach ulcer, since her mother, brothers, and sisters had died and left her the only survivor of a large family Her symptoms grew worse as her economic insecurity grew greater She was anxious as she tried unsuccessfully to maintain her former social level She was frustrated, disappointed, unstable, and fearful The only financial asset she possessed was a large house It had lost much of its value through age She was advised to sell her house and move away This she did, and her symptoms improved and she felt better than she had for a long time

The psycho-analysts have an interesting theory as to why emotional upsets cause stomach disturbances and later ulcers The greater the lack of life's gratifications, the greater will be the unconscious wish for love and help The stomach craves food, not to satisfy actual hunger, but to receive physical comfort—symbol of love and help The stomach under this permanent stimulation behaves as if it were about to receive food Digestive upsets, heartburn, belching, and other symptoms of the nervous stomach are probably due to this chronic stimulation, which in time leads to the development of an ulcer. Such a stomach actually feeds on itself

You must learn how to relax and take things easy in order to prevent stomach ulcers Here are a few simple suggestions.

1 Acquire a sense of self-confidence and self-esteem

2 Work toward a sense of self-detachment Think more of others than of yourself

3 Get around something you cannot get through

4 Do not allow any situation you cannot master to upset you

5 Never take anything or yourself too seriously

These aims are not easy, and their acomplishment takes time But keep them before you They will bring you good health and peace of mind

Curing the DRUG HABIT

FRANK LEIGHTON WOOD, M.D.

Drug habits are exceedingly hard to cure because they become so much a part of the patient

The Drug Habit will really make a slave of you

THE narcotic habit-forming drugs have a soothing effect that gives the user a sense of well-being The three most common habit-forming drugs are tobacco, alcohol, and opium Morphine and heroin are derived from opium Tolerance to such drugs is quickly acquired, so that once addiction occurs, a gradual increase in the amount used is necessary in order to obtain the desired effect

A drug habit always consists of two factors—an addiction to the drug itself and a habit reflex The addiction, or intense craving, which accounts for the severe discomfort experienced when the drug is withheld, can be overcome in a few days by complete abstinence This is called "getting off the drug" But the habit reflex persists, and that is what makes drug habits so hard to cure

We have a multitude of mental and physical habits Drug habits are a combination of one or more of these, with a drug addiction Some habits are little more than simple reflexes The knee jerk is an inherent simple reflex So is the blinking of the eyes when suddenly irritated by dust or a bright light Many other simple reflexes are inherent, but all the complex ones are acquired, that is, they are built up around or conditioned upon the inherent ones Thus we come to have reaction patterns, or complexes of behaviour, and we condition our reflexes to our surroundings.

When we use the word *habit* we really mean "habit reflex," for the carrying out of any habitual act involves the five stages of a habit reflex These five are

1 Reception of stimuli from an external exciter

2 Transmission of impulses toward the brain (afferent system)

3 Central adjustment in the brain, spinal cord, or nerve ends

4 Transmission of impulses toward the muscles (efferent system)

5 The response of the muscles

The exciter may be the bite of a fly, the smell of cigarette smoke, the sound of a snake's hiss, the sight of a ball rapidly approaching one's head The stimuli caused by these exciters are received by the end organs of sense in the skin, the roof of the nose, the tongue, the ear, or the retina of the eye From them they are transmitted to the central adjustment mechanism through the afferent system This consists of the fibres of individual nerve cells and those of the spinal cord These fibres transmit stimuli from the sensory end organs to the centres in nerve ends, spinal cord, the brain

The central adjustment mechanism is not too well understood except as the simple reflexes are concerned But before simple inherent reflexes can become complex habit reflexes they have to be conditioned by mental direction and training For instance, an afferent impulse, or message, comes in from the retina indicating that a ball is rapidly approaching the head If the person has developed habit reflexes (skill) in catching balls, the message is instantly relayed to the motor area of his brain, which controls the muscles of his hands and arms, and he will catch the ball If the person is not skilled in catching, the message is relayed to the motor areas of other sets of muscles so that the ball may be dodged All this may happen before there is time for conscious thought and direction

The efferent system must transmit the impulses from the motor area of the brain to the necessary muscles before the person can catch the ball or dodge it The response consists of the co-ordinated contraction of these muscles

Complex forms of habit reflex are due to extensive mental conditioning, and are made possible only after long experience or practice Automatic reaction to an emergency while driving is an

example of this If while a person is driving fast a child suddenly appears on the highway, the skilled driver responds at once to the emergency He releases the clutch and accelerator, applies the brake, and turns the steering wheel to avoid the child All these acts, involving direction of movements of the arm and leg muscles, take place in a fraction of a second in a normal person If he had to direct all these movements consciously, it would take much longer

Complex reflex acts (habit reflexes) are the material out of which all our mental and physical habits are made and we acquire many of them In them lies our capacity to do things well Our usefulness, happiness, and success in life depend not only on the number but on the kind of habits we form Most of the important habits that affect our entire lives are contracted in childhood or youth. That is why children should be guided and disciplined carefully, so that the ratio between the good and the bad habits acquired will be favourable There are habits involving each of our special senses, habits of eating and drinking, of speech, of observation Our views on life, our opinions of people, our various prejudices and views on important questions, no matter how illogical time proves them to be, become so fixed and habitual that they are seldom completely changed.

Those addicted to the use of habit-forming drugs seldom remain cured, but relapse sooner or later after having their craving, or addiction to the drug, removed The reason is that the most important part of the drug habit, the habit of reflex, often has had no treatment at all Many times each day he is reminded by the sight or smell of the saloon, by the sight of the bottle, or by the invitation of a friend that he should drink These are all exciters to his firmly fixed drink reflex

Whether he drinks depends on the persistence of the exciters and the amount of will power he has to resist them The same can be said of the smoker who has been cured of his craving for tobacco Not only must he resist the exciters, which he perceives through his senses (the sight of tobacco smoke, the smell of it, the invitation to smoke), but he has contracted the habit of smoking at certain times, in certain places, and in certain emergencies He has exciters that originate in time, place, and occasion

It is hard to break the ordinary habits of life and drug habits too, because they have become complex habit reflex acts, which have been built around simple habit reflex acts The longer these habits have persisted, the harder they are to break And when we combine habit reflexes that involve seeing, hearing, smelling, tasting, and feeling, as well as eating, drinking, speaking, and thinking, with the profound effects of a drug that temporarily soothes the nerves, relieves pain and worry, destroys restraint, and weakens the will, it is not hard to understand how firmly fixed the narcotic drug habits due to the use of tobacoo, alcohol, and opium become

The *daily* user of morphine will surely become addicted to it in a short time The *daily* user of alcoholic beverages will almost certainly become addicted to this drug also, although as a rule it will take longer The *daily* user of tobacco will likewise c e r t a i n l y become addicted to its use

But none of these addictions is hard to cure A few days of total abstinence, and all the pain or discomfort due to sudden and complete withdrawal of the drug is gone

But the habit reflex persists The longer it has persisted, the more firmly fixed it has become The smoker of a few months or a year can usually quit the weed without a pang, and stay quit The smoker of five years finds it much more difficult The veteran of thirty or forty years usually will not attempt to quit, even though he knows the

(Continued on p 30)

Here are three poppy pods slashed and drops of juice showing. From this juice opium and its derivatives come In the circle is a leaf of the marijuana plant, another of the habit forming drugs

What Do You Fear?

EDNA D. HICKS

Look your fears straight in the eye, and they fade away. They are the cowards, not you

ARE you afraid of lightning, thunder, cellars, darkness, or high places? Practically everybody has one or several phobias Your relatives have them, and so do most of your associates Fully twenty-five per cent of so-called normal people are more or less harassed by special phobias, superstitions, and chronic fears It may surprise you to know the facts and realize how people suffer from terror and panic Yet human fears are easily recognized and can be made less severe

A phobia is a persistent dread, or fear, or something that is harmless. Anything that can't possibly hurt you, yet that you are afraid of for some reason, is a phobia Reactions to phobias are not all alike Some are mild, and others are severe Students of the human mind believe that most phobias can be traced directly to some experience in childhood

Many parents realize that their children are afraid of the dark The youngsters become fearful as soon as the light is turned off As a result of this fear, these children usually continue to be afraid of the dark, even as adults Fear of darkness is called nyctophobia

Nearly all of my acquaintances have at least one of these three well-known phobias: fear of high places, acrophobia, fear of closed places, claustrophobia; fear of the dark, nyctophobia

Reactions to these fears may be severe trembling, accelerated heartbeat, heavy perspiring, and a hopeless feeling of weakness.

Napoleon Bonaparte's phobia was a fear of cats, aelurophobia He perhaps could face a hundred cannon without flinching, but ten cats would probably have driven him into a panic

An acquaintance of mine (call her Mrs Brown) lived above me in a small apartment Owing to lack of space, she had to keep a large trunk in the basement When getting supplies from the trunk, she would open the basement door and place two huge rocks against it As to why she did that, she said, "I am scared to death the wind may blow the door shut or that someone may not know I am down here, and close the door"

I reminded her there were six large windows, that anyone passing on the street would hear her call She insisted she still would be so frightened she couldn't recover if the door blew shut Mrs Brown was afraid of cellars and basements That is batophobia

I asked her to tell me about the basements and cellars of her childhood After a little thought she said she could vividly remember the storm cellar they had in her home when she was a child She was always terrified when her father carried all the children to the storm cellar She had mental visions during those storms that the wind would blow debris against the door, and they could never get out and would be buried alive That is taphephobia The storm being the cause of so much of Mrs Brown's fear, naturally she is afraid of lightning (keraunophobia) and thunder and rain (astrophobia)

If a child has been lost in a crowd or experienced any tragedy in a large group of people, he may always have fear of a crowd and be afraid in open spaces or wide, open streets (agoraphobia)

If you discover that a person is afraid of water (hydrophobia), yet you force him to ride in a canoe, there is a possibility that he may have a heart attack People who are afraid of high mountains, high buildings, or high steps (acrophobia) could never be

Most of the phobias and chronic fears can be traced to some childhood fright or upset which has left an indelible mark on the individual

trapeze performers You could never be a nurse or a doctor if you had a morbid dread of the sight of blood (hematophobia)

My daughter has a fear of spiders (arachnephobia) If she should see a harmless long-legged spider on the ceiling, she would get panicky, run out, and call for someone to kill it before she would re-enter the room As to why she is afraid of spiders, she recalls that when she was a little girl five years old her grandpa told her there were lots of black widow spiders among the geraniums, and if one ever bit her, she would die He insisted that if she saw one, she must call him quickly Upon her first meeting with one, she came running into the house out of breath, and took grandpa by the hand to show him the black widow He immediately put a match under it and burned it That happened many years ago, but she cannot pick geraniums nor walk close to geranium plants for fear of spiders If someone should accidentally shove her into a geranium hedge, she would become panicky

A friend of mine hesitates to meet strangers, in fact, has a fear of strangers (xenophobia) Also he is afraid he will blush among strangers (erythrophobia)

A woman I know cannot go to a parade because the horses and animals frighten her (zoophobia) As a child, when she was sitting on the curb watching a parade, a trick horse pranced close to her feet and frightened her

Also when she was a little girl, she was picking flowers and a bee stung her Now she is afraid of bees and wasps (melissophobia) If a bee should fly around the windshield of the car she is driving, she would have to stop, get out of the car, and have someone else drive the bee away

Many years ago my Uncle Wilbur used to tell me that if I wasn't a good girl he would sell me to the ragman Whenever the ragman came past the house Uncle Wilbur would say, "Here comes the ragman, you'd better be good" To this day, I get a severe sick feeling when I hear the name Wilbur A morbid dread of hearing a certain name is onomatophobia

Many of my acquaintances have a fear of snakes (ophidiophobia) Some people are afraid of snakes even in moving pictures, though they know the snakes cannot do them harm

Some life-insurance companies never date an insurance policy on the thirteenth of the month because so many people are superstitious and dread the number thirteen (triakaidekaphobia)

When my friend Mrs Smith was a little girl, her mother once forgot to disconnect the electric iron, and it caused a fire in her house The little girl sat out in the yard crying from fear as the truck came and firemen dashed around putting out the fire To this day Mrs Smith has a morbid fear of fires (pyrophobia)

Other phobias are the fear of metals and metal objects (metallophobia), and a morbid dislike of fish (ichthyphobia)

Mrs Jones is afraid to walk or ride over a bridge or any framework near water (gephyrophobia) When she was a child she saw an old bridge collapse from the weight of a car crossing it

All these unnatural fears have a natural cause Although it may only be mental, it may increase in intensity as the years go by

If you want to cure yourself of your phobia, you must know exactly what you are afraid of and what situation caused the panic This

may sound too simple, but it is the key to overcoming fear

Try to think what incident in childhood caused the fear you have today for certain objects or situations When you have discovered the reason, try every day to get a little less disturbed, a little less afraid, a little more calm, by telling yourself you can and will pull through with discipline and determination

For example, if you are afraid of cellars, carefully examine the door, the surroundings, and the weather Convince yourself that there are no distressing agents that can harm you

If you are afraid of bridges and constructions over water, examine the strong steel supports, and realize how utterly impossible it would be for any harm to come to you Do the same for spiders A spider on the ceiling cannot possibly hurt you, it is too far away Use mental discipline, and after a short time your phobia will diminish to such an extent that you can live with it happily

In reality, a mild phobia is a natural instinct to protect us from danger For example It is only prudent to keep a safe distance from the edge of a cliff Although an exaggerated fear of high places may sometimes prevent a person from even going upstairs to a second-floor bedroom, a normal fear of danger is nature's way of protecting us from harm

So whatever your pet phobia may be, face it squarely Don't let it get out of hand and become an obsession, because such an attitude may go much too far

Keep happy, keep safe, and you will have no fears!

35 QUESTIONS AND ANSWERS
on the
COMMON COLD

MAN has defeated, or at least tamed, some of the worst diseases ever to afflict him—among them, smallpox, diphtheria, diabetes, tuberculosis. Even polio soon may be a threat of the past But the most prevalent ailment of all—the common cold—still defies science and medicine

The common cold is nothing to *sneeze at It takes a terrific toll* among the [American] nation's 62,000,000 working men and women, costing the American economy a staggering $5,000,000,000 a year in wages, production and medical expenses In fact, one out of every two workers who fail to report on the job is absent because of a cold

Appalled by these economic facts, industry has decided to make a concerted attack on the elusive, indomitable ailment Fifty of the nation's top industrialists and bankers recently set up the Common Cold Foundation in New York City to support selected research projects in schools and hospitals. Heading the foundation's scientific advisory committee is Dr Yale Kneeland, Jr, associate professor of medicine at Columbia University, and directing the medical advisory committee is Dr Melvin Newquist, medical director of The Texas Company

It may be a long, tough fight What medical men already know about the common cold—and what they don't—is summed up below in the answers to a series of questions asked of leading doctors working with the foundation Starting with this body of information science, medicine and industry will try to crack, once and for all, one of the most annoying medical mysteries of all time

1 How often does the average person get a common cold?

About three times a year, and colds keep the average worker home a total of two and a half days a year

2. Do we build an immunity to colds?

Perhaps After a cold, most victims seem to build up a fairly good immunity which lasts, generally, a couple of months

3. Do we know for certain what causes a common cold?

Science is not sure, but a virus is believed to be the culprit Or, perhaps, several viruses

4 Is the common cold the most common of all man's illnesses?

It certainly is There are more than half a billion colds in the U S each year—an average of approximately 20,000,000 a day in the peak months

5. Do cold epidemics follow any pattern? Are there any particular times of year in which colds are more numerous?

Yes The first wave of colds usually hits in early fall, soon after schools open The second comes in mid-winter, around February, and the third in early spring

6 *In which of these three* periods do we get the most severe colds?

Mid-winter February is the worst month for common colds

7 Is there any worst place for colds?

Yes, colds are most prevalent in the north central areas Among cities, Chicago has the highest common-cold rate in the country

8. Does this mean that cold weather may be a cause of colds?

No Cold weather can't cause a common cold But it may lower your resistance to one, or aggravate an existing cold

9. How about drafts and dampness? Won't they cause colds?

No If there's no virus around, or if you're in a period of relative immunity, you could stand in ice

Just about everyone gets the sniffles at least three times a year But thanks to a new industry-backed research programme, we may yet find the cure

water or in a draft for hours at a time without catching cold

10. Do Eskimos catch cold?

They do now, but only since white men brought the virus to them

11. What animals other than man are subject to the common cold?

Only the anthropoid apes, such as gorillas and chimpanzees

12. Just how old is the common cold?

It's probably one of the oldest maladies known to man Science has been trying to track down its cause for at least 2,000 years

13 How is the common cold spread?

By direct contact between two persons, as in kissing, or by contact with airborne droplets of infected nasal discharge

14 Should we, therefore, expect always to catch cold after having direct contact with a cold victim?

No There's only one chance in ten that you'll catch cold even under these favourable circumstances In fact, even when heavily *infected* nasal drippings are introduced directly into the nostrils, there's no more than a 50-50 chance that the infection will take Your resistance level at the time may determine the result

15. What lowers resistance to a cold?

Again, science is not sure But poor nutrition and fatigue may play a part That's why it's wise to eat sensibly and get plenty of rest during the common-cold seasons

16. Why are there fewer colds during the summer months?

Possibly because there is less indoor contact among people—and because outdoor activity improves our general physical condition

17 Are antibiotics capable of curing—or preventing—a common cold?

No Antibiotics have no effect upon the virus

18 Does that mean we should always avoid taking them for a cold?

It depends upon the cold If it's a relatively serious one, accompanied by fever, drugs such as penicillin may prevent secondary infection But don't take them for just plain sniffles

19. What about antihistamines? Can they prevent colds?

They appear effective only for allergies But they do have some sedative value

20. How can we differentiate between an allergy and a cold?

We can't, from the symptoms alone The condition must be medically traced back to its source

21. Do colds, like allergies, have psychosomatic features? In other words, can a cold be affected by mental attitudes?

There is no proof that anxiety or tension can make you more susceptible to a cold or make an existing cold worse But either may make a cold *feel* worse

22 How about age and the common cold? At what age are we most susceptible?

The worst age for colds seems to be between one and three years After that, susceptibility gradually tapers off

23 What is the age of greatest immunity?

Surprisingly enough, the first few months of life The newborn are almost totally immune to colds We don't know why

24 Is one sex more susceptible than the other to colds?

Technically, no But mothers catch colds more often than fathers—probably because they spend more time with the children during the various cold seasons

25 Is it advisable to keep young cold victims out of schools?

It depends entirely on how they feel Common sense is the only rule Most authorities agree you can't isolate children enough to narrow the field of contagion, anyway

26 Why not? Won't keeping children at home prevent them from infecting other children in the school?

Not necessarily A cold may be infectious hours before the first

(Continued on p 24)

[illegible] ILLNESSES SOUGHT AT U.S. HEALTH CENTRE

(Continued from p. 7.)

clinically and then hunt for patients suffering from those conditions.

Medical schools, journals, and hospitals are notified, and doctors are asked to refer patients who will fit into the clinic's research programmes

During 1954 clinicians were interested in patients suffering from over 100 different ailments Typical studies made were of hormone-producing tumours, metabolic balance in victims of chronic rheumatoid arthritis: psychosomatic problems present in asthma and ulcerative colitis, rheumatic fever, epilepsy, high blood pressure, and diseases of the soft tissues of the mouth

Clinic patients pay no fees Anybody can apply for admittance regardless of race, nationality or creed But no patient will be accepted unless he fits into the research programme, has been referred by a doctor, is willing to spend sufficient time at the hospital for adequate research and is intelligent enough to co-operate with the staff

Some of the patients, mostly volunteers from religious groups, have nothing at all wrong with them Known as "normals," these men and women are as carefully studied as the sickest patients, for doctors realize they can't understand the abnormal until they know all about the normal

From the moment he arrives until the day he leaves, everything possible is done to make the patient happy A social work department helps with family or employment problems, vocational guidance and physical therapy are provided for those who need or want them, and patients who so desire can work on the hospital newspaper, use its library or take part in theatricals

National Heart Institute doctors are experimenting with a new pre-operative technique of immersing patients in ice before surgery The purpose of lowering the patient's body temperature is to reduce the body's need for oxygen during an operation This makes it possible to cut off the circulation during a heart operation for a much longer period.

Probably what Clinic patients appreciate most is the attitude of the staff From the first they are made to feel a part of the research team Staff members answer all questions and gladly spend hours with the patient discussing his or her case As a result, patients often become as intrigued by a new test or experiment as the doctors

Although patients get every consideration their stay at the Clinical Centre is not always as pleasant as it might be at a regular hospital To begin with they must stay at the Centre an average of thirty days or four times longer than they would at a normal hospital While at the Clinic they must undergo from 2½ to 5 tests a day as compared with the ½ to 1 test per day normally given hospital patients For clinic scientists are not only interested in treating the disease They want to find out all they can about it so a more effective remedy can be discovered

Each patient is made to understand that the numerous tests may lead to nothing—that just because he is in one of the most impressive research centres in the world doesn't mean he can expect a miracle He may, however, be lucky enough to be in the hospital when something succeeds, when a new drug for treatment of high blood pressure is developed or when a new antibiotic halts cancer in its tracks But he also learns that medical knowledge is gleaned at a snail's pace

In all cases the welfare of the patient is placed above the potential value of any research project In fact a special medical board has been established to review each research project to make certain that the patient will come to no possible harm

A quick tour of the clinic gives some idea of the scope and variety of its research projects. On the Heart Institute's floor, for example, men and women may be seen wearily walking a mile a day on a treadmill with regulated speeds

and slopes while the amount of energy they expend is carefully measured with an electric instrument

To the uninitiated the Centre's Arthritic Institute floor looks more like a college dormitory than a hospital wing For here in comfortable studio-like rooms a dozen or so young men and women lounge about discussing yesterday's basketball game in which many of them participated

These volunteer normal patients had given a pint of their blood to the laboratory, had it made radio active and then transfused back into their systems Samples are taken regularly as part of an investigation to find out how long red corpuscles live Such knowledge should prove invaluable in the war against metabolic ailments

A visitor can see a variety of

ıctivities in the laboratories In one ection, for example, a young man s watching an automatic radio-ıctivity counter. The substance vhich he is measuring was patiently xtracted from the urine of a dog vhich had been given a cancer-ıroducing chemical "tagged" with adio-active isotopes. The count eveals what proportion of the hemical the dog retained

Visitors see white-coated men nd women synthesizing new hemicals Others are testing new lkaloids for properties that may ow the quickened heart, deaden ain, allay a burning fever or estroy the lethal microbe

The progress of medical research slow and tedious but already the linical Centre has contributed ew knowledge to medical science

This winter, for example, two ew drugs—meticorten and meti-ortelone—were put on the market hese drugs the Institute had dis-overed to be three to four times ıore powerful in treating ıeumatoid arthritis than cortisone

A Clinic scientist was responsible r the discovery of the basic meta-lic defects responsible for ıleptic seizures The abnormal ain tissue was found to lack two ıportant chemicals Until recently › way was known to send these ıemicals through the blood ırrier of the brain and make up ıe deficiency in the damaged sue Now researchers at the entre have found two related ompounds—glutamina and paragine—which in a limited ries of tests have reduced the ımber of seizures in hitherto ›peless epileptics by sixty per cent more.

Most of the discoveries made at e Clinic are so complicated and chnical they make little sense to e layman But when fitted gether with millions of other facts ıng discovered at the Clinic and her research institutes throughout e world they may well mean a nger, better life for everybody

HOMEMAKERS' HELPS

RECIPES

Dal and Vegetable Soup

One quarter cup masur dal; 1 medium onion; 2 medium potatoes, diced; 1 qt. tomato juice; 2 cups water; 1 cup diced carrots; celery; peas; ½ teaspoonful Marmite.

Fry chopped onion in small amount of shortening, add other ingredients and cook until vegetables are tender If a pressure cooker is used cook about 15 minutes at 5 lbs pressure Let pressure come down and then simmer over low fire for half hour A bit of butter may be added and more liquid if desired

Rice Tomato Soup

One-fourth cup rice; 4 cups water; 2 stalks celery; diced onion and green pepper; 1½ tablespoonfuls fat; 2 cups tomato juice; parsley.

Slightly saute celery, onion and green pepper in fat in pressure cooker Add rice and fry to a very light brown Add all other ingredients except parsley, bring up to pressure and remove from fire for pressure to come down Add parsley and serve

Dal and Potato Soup

One-half cup masur dal; 1 medium onion; butter; 2 or 3 medium potatoes; milk; salt.

Fry the finely chopped onion in small amount of shortening Add dal, diced potatoes and salt Cover with water and cook until the vegetables are tender Add milk to make the desired consistency Heat and serve Chopped parsley may be sprinkled over the top

Spinach Soup

One-half pound spinach *(palak)*; 3 or 4 cloves garlic; 1 medium onion; salt; 1 tablespoonful butter; milk; ¼ cup cream; paprika (if desired).

Cook spinach, garlic and onion with the salt until tender Force through sieve or Foley's food mill Add milk, cream, butter and paprika until soup is of desired consistency

Cream of Tomato Soup

Three cups stewed tomatoes; 1 minced onion; 3 tablespoonfuls butter; 3 tablespoonfuls flour; 3 cups milk or thin cream; salt; paprika; bay leaf, if desired.

Cook tomatoes and onion ten minutes, force through sieve, re heat Make a white sauce of the butter, flour and milk Before serving, stir hot tomato pulp and juice gradually into hot white sauce, season to taste and serve at once

Tomato Soup with Dumplings

One-fourth cup water; ¼ cup milk; ¼ cup shortening; hot soup broth; ½ teaspoonful salt; ½ cup flour; 2 eggs.

Combine water, milk, shortening and salt and add ½ cup flour. Remove from fire and stir until smooth Add 2 eggs, stir until smooth and shiny Add to hot soup broth by teaspoonfuls Cover and cook ten minutes

* * *

"To cook well, to present healthful food upon the table in a healthful manner, requires intelligence and experience Do *not* think the time wasted which is devoted to obtaining a thorough knowledge and experience in the preparation of healthful, palatable food"

KIDDIES' KORNER

THE CAT THAT PAID THE BILL

Arthur S. Maxwell

THIS is a true story about two boys and a cat It happened many years ago in the city of Bath, England The boys, with their mother and sister, had come over from Wales to attend some gospel services in a big tent in the city

The family was not well off, and money just then was very scarce Not being able to afford many holidays, they felt that this trip to Bath was something very wonderful, and they enjoyed every moment

Then one Thursday morning Mother called the boys to her and told them that she could not afford to stay any longer, and that they must leave the next day

Bertie and Willie were very much disappointed, and could not understand why they had to leave while all the other people stayed They did not think it was a bit fair, and they pleaded with mother to let them stay But she told them again that there was no money left, and they would have to go

"But can't we ask Jesus to send us the money?" said the boys "He has plenty, and surely He wants us to stay to all these meetings"

"Of course you can ask Him," said Mother, and the next morning—the very morning that they were to return home—they knelt down and asked Jesus to send them fifteen shillings so they could stay over the week-end

Then they left their lodgings and went to the big tent Believing that Jesus would answer their prayer, they did not tell anybody that they might have to leave that day, and they did not say good-bye to anyone.

Afternoon came The children's meeting closed, and the boys started back to their apartment Still no money had come It seemed that they would have to return home after all

Now, in order to reach the house in which they were staying, the boys had to cross right through the town from Beechen Cliffs to Walcot Usually they followed the lower Walcot road, but this time, departing from their custom, they turned into the Paragon, a crescent of large houses

In those days there was a cabstand on the corner of the Paragon, and the children loved to play around it As they were doing so, Bertie, who was ten years old, suddenly called to his brother

"Willie, come and look at this!" he said, pointing to a notice stuck on the window of a doctor's house just opposite the cabstand Willie ran across, and both boys read the notice

LOST

Valuable Persian Cat Anyone returning same to this address will receive 15 shillings reward

A fever of excitement seized the boys Fancy! Fifteen shillings reward! Why, that was the very amount they had asked Jesus to send them They could almost feel the money in their pockets Now they could stay! Wouldn't Mother be pleased! The only difficulty, of course, was to find the cat

"We must find it!" said Willie, all eagerness

"We are going to find it!" said Bertie.

But where could it be? It might be anywhere in Bath, for all they knew, and they had very little time to search, as they were due to leave for home in an hour or two

All along the street they talked about the possibility of finding this precious cat One moment it seemed impossible, the next they almost felt it purring in their arms

They had not gone far when a sound from a dark corner brought them both to a standstill, dumb with excitement and surprise

"Meow! Meow!"

Willie looked at Bertie, and Bertie looked at Willie Could it—could it be?

They peered down into the area whence the sound had come To be sure, there was a cat at the bottom They ran down the steps and found themselves face to face with a beautiful big Persian cat Indeed it was so big that neither of the boys could pluck up courage enough to touch it

"It must be the doctor's cat!" they cried together "But how shall we get it back to him?"

"You stay here and watch it," said Bertie, "while I run back to the house"

The doctor's house was only a short distance away, and in a few moments Bertie was back again with the doctor's servant Yes! It was the cat that had been lost

In great glee the boys returned to their mother to tell how Jesus had answered their prayer, and that they need not go home that night

The next day they visited the doctor, who gladly handed them the reward and thanked them for helping him to find his cat Mother was able to cancel the arrangements to return home, and they stayed until the meetings closed

Isn't it wonderful what Jesus will do to answer little boy's prayers?

And can you wonder that both Willie and Bertie are missionaries for Jesus in Africa today?

35 QUESTIONS AND ANSWERS ON THE COMMON COLD

(Continued from p. 19)

symptoms appear—in which case other people will already have been exposed

27. How about a cold plus fever? Is it wise to stay home if you have both?

Yes. The rest gives your body more energy to fight the infection

28. Is it sensible to dress warmly when suffering from a cold?

Do not wear more than you normally would Over-heating is no better than chilling

29. Should a common-cold victim avoid air-conditioned places?

He should avoid any *extreme* temperature change, since it might aggravate the cold, minor changes probably don't matter

30. Is there any truth to the old adage, "Feed a cold; starve a fever"?

Again, common sense is the rule Cold victims are wise not to over-eat; it places an added burden on their systems, which are already working harder than usual to fight the virus So long as a patient gets a reasonable amount of nutrition, let his own appetite be the judge.

31. Are any particular foods good for a cold?

No. Any food is acceptable so long as it's not so heavy as to require extra energy to digest

32. How about plenty of fluids?

They're always good for you; they help perk up your system

33. How about grandmother's old "sweat treatment"?

Forget it All it does is step up body excretions. By drinking fluids, you can achieve the same result with a lot less discomfort

34. Is there any hope of ever finding the cause of—and a cure for—the common cold?

Yes Other respiratory diseases, such as strep throat and pneumonia, have been licked. And the new Enders-Weller-Robbins tissue-culture technique opens the way for a new attack on the problem of the common cold.

35. What is this technique?

It is a method which enables scientists to grow viruses in test tubes Previously, the cold virus could be studied only in apes or man. That's one reason why there hasn't been more research into the common cold; the primates are expensive, and more abundant animals—for example, rabbits—don't catch colds Thus, thanks to tissue culture, it should now be possible for the first time to produce cold virus relatively cheaply in the quantities vitally needed for research. Never before have prospects been so bright for victory over the common cold.—Courtesy of *Collier's*

THE EDITOR SAYS

(Continued from p 5)

try to put it together properly so that it makes sense

So, for those of you who really wondered what Dr Welebir said in that last column, I am including here the last portion of Dr Welebir's article and I hope that this will, to a small degree, compensate for the inexcusable lack of careful workmanship on the part of someone either on the imposing stone or on the press before the printing actually began

We hope that our readers have had a good year and that they have found the *Herald of Health* magazine a blessing and a help to them The year 1956 is just before us It is a new year, a year that will be for each of us just what we make it The past is gone For some, it is a time that they would wish to live over again if they might; for others, it has been a time of joy and happiness that fulfilled their highest dreams

If each of us would determine day by day that we would think only good thoughts and speak only good words and do only those deeds which we could look back upon with joy and satisfaction, then when we come to the end of each day we would be at peace with ourselves and the world, and at the end of each week, each month, each year and even at the end of a life-time, we could say that we had fought a good fight and lie down to that last long sleep as one who folds his hands for quiet rest with no regrets—with no wishes that it might have been otherwise, but only the joyful knowledge that ours had been a good life May we each, young and old, strive each day to make that day the most perfect that we have ever lived, for as the poet truly said, "we pass this way but once"

—L. J. L

Last Column of Article: "Sterility in Men."

disease of the generative tract in the male

The urological surgeon will be able to examine any sterile husband and discover conditions that can be corrected surgically or, when necessary, medically, with such treatments as prostatic massage or measures to clear up urinary tract infection Or he can look into a partial impotence

One of the most important examinations the physician will make is a semen study The specimen is collected according to directions, and is examined within one hour The sperm is readily counted under a microscope. The normal specimen should contain sixty million to ninety-five million sperm per cubic centimetre The physician makes a careful study for abnormal forms

Sterility is a complex and difficult problem, but a sperm count can quickly determine the state of man's potential fertility

One of the great mysteries today is how an infertile marriage can

finally produce a normal child after the adoption of a baby Often a husband and wife separating in divorce can produce normal pregnancies in new marriages Although it may appear that these problems have their roots in the psychological make-up of the marriage partners, doctors are not satisfied to accept this explanation More and more research is going on to discover the cause of these childless marriages

If you have a sterility problem in your home, consult your physician and place yourself in his hands so that he can give you the best possible chance for having a child to make your home happy The old adage is altogether true. "If at first you don't succeed, try, try again" This is the advice of every sterility specialist Success often comes with perseverance

1 This question and answer service is free only to regular subscribers

2 No attempt will be made to treat disease nor to take the place of a regular physician in caring for individual cases

3 All questions must be addressed to The Doctor Says Correspondence personally with the [illegible] is not available through this service

4 Questions [illegible] which personal answers are [illegible] must be accompanied by ADDRESSED AND STAMPED ENVELOPES answers cannot be expected under ONE MONTH

5 Questions [illegible] on Post Cards will not receive attention

6 Make questions short and to the point [illegible] write them very clearly

7 Questions and [illegible] will be published [illegible] without objection but no [illegible] published Address [illegible] Doctor Says Oriental Watchman and Herald [illegible] Post Box [illegible] Poona 1

TINNITES: Ques.—"The drum of my right ear has become very weak and reacts strangely to loud noises, with a hiss sound. Please suggest something to strengthen the drum."

Ans.—The condition of which you complain is known as Tinnites This may be caused by various diseases and toxic disturbances such as excessive smoking, excessive use of Quinine, Streptomycin, etc The treatment consists in removing the cause, if possible. 300 mg of Nicotinic Acid daily may help in some cases I would advise a thorough check by a well-qualified physician to determine if possible, the true cause of your complaint

?

NERVOUS DEBILITY Ques—"A person aged 34, weighing 90 pounds, feels obstruction in the stomach and in the back when breathing or belching Never has a feeling of fullness after eating, and no pain Eating cold or cooling foods immediately brings on chest cold and cough Always feels draggy and dull

Ans—These complaints are probably on a nervous basis I would advise a hygienic programme of balanced rest, exercise, etc with regular hours of eating and sleeping and of proper diet free from tea, coffee, and other stimulants Nothing should be eaten between meals The largest meal should be taken in the morning Be sure the diet is simple without condiments, and containing an abundance of fruits, vegetables and whole grain products

?

ACNE AND DIET Ques—"I have always assumed acne was caused from nerves, and was never told to restrict my food I'm twenty five years old, and my condition doesn't seem to be getting any better I would appreciate more information regarding foods that I should and should not eat I do not eat many eggs, perhaps one or two a week, and do not drink very much milk In regard to milk products, are cheeses allowed an acne patient, including cottage cheese?"

Ans—Acne is a common affliction of adolescents, but usually by the age of twenty-five it has been overcome

We treat a good many cases of acne in our office Our advice is to restrict the diet in fats and sugars eat freely of fruits and vegetables without sugar, fatty seasoning, or mayonnaise Protein should be kept high, and is best found in dairy products

I would suggest that for a while you drink skim milk or buttermilk. about a quart a day Eat freely of cottage cheese, but very little yellow cheese Use only whole grain cereals and breads On your cereals you may use whole milk Use fruit with cereal rather than sugar Baked or boiled potato is good Use butter or margarine sparingly

In connection with your bath, try what is called a "salt glow" That is, dampen a cupful of salt as coarse as you can get by adding just enough water so that the salt will stick to your hands After the cleansing part of your bath scrub your body all over with this damp salt, including your face While you are doing this, let the water be running out of the tub Then turn on the cold and get down into the cold water (or under the shower) and wash the salt off

Your skin should be pink and glowing Be vigorous, but don't rub hard enough to make your skin smart Start in gradually with this salt glow, and continue it until you can take a thorough treatment ending with plenty of cold water You'll feel like a million! The best kind of salt is what is called three quarter-ground salt. By inquiring you can probably find out where to obtain it.

?

FALLING HAIR: Ques.—"I have taken a full course of Pencillin injections and now I am taking B Complex tablets, and still my hair continues to drop Kindly suggest a cure for this condition"

Ans—Falling hair is not recognized as resulting from taking Penicillin injections There are several types of conditions resulting in the falling of hair, the most common being "premature Alopecia" due in a large degree to hereditary tendencies Sometimes hair falls out following a severe fever and occasionally in small areas due to certain other diseases I would suggest the following programme in an attempt to control the condition

1 Wash the hair twice a week with a mild soap or use Godrej Cinthol soap Massage the scalp each night with the fingers lifting the skin and massaging it well over the entire scalp

2 In using a comb be sure that it is in good condition and that it does not injure the scalp

?

PLASTIC SURGERY FOR SCARS Ques—"I have come to know that smallpox scars on the face can be removed by 'plastic surgery' Would you kindly let me know whether there is any bit of truth in it?

Ans—Smallpox scars, if large and deep, may sometimes be removed by surgical excision If the scars are superficial, so called Sand-paper surgery is effective The skin is anæsthetised and sanded with sterile sand paper, removing the superficial layers In time new skin formed is without scars Recently in America, a wire brush has been devised which is attached to an electric motor The skin is frozen and planed down to the base removing the scars with this device It is said to be very effective in removing superficial skin blemishes I do not know if any such equipment exists in India

?

ABDOMINAL TUBERCULOSIS Ques—"A patient had an attack of abdominal pain three years ago; was treated for Dysentery in a big hospital, but of no avail At last an

injection of Streptomycin was tried to bring the patient to normal in temperature and health Two years later the attack re-appeared So the same injection brought the state of health into normal Please suggest some permanent remedy without going to a sanatorium"

Ans.—If the patient is suffering from Tuberculosis of the abdomen, I would advise the use of a combination of Isonex and P A S or Isonex with Ambistryn The patient should have a non-irritating nutritious diet and also should have extra Calcium and Cod Liver Oil The use of tea, coffee and tobacco should be banned

?

STAMMERING Ques—"I suffer from stammering but I can speak alone for a long time There is no trouble in the fluency and I can sing for a long time But when I speak in the presence of lecturers or in debates the trouble arises Please advise me the treatment I should take"

Ans—Stammering is due to nervous tension It is possible for you, by speaking slowly, to overcome this habit You should not get excited The late King George of England was a stammerer He finally overcame this handicap You can do the same

YOUR BRAIN—GOD'S MASTERPIECE

(Continued from p 11)

You may have heard that celery is good brain food You wonder whether certain foods are better for the mind than others

We do not know of any one food that possesses special benefit for the brain But it certainly is true that our mental powers are influenced by what we eat Do you recall the last time you sat down to a gleaming table spread lavishly with steaming hot foods, colourful fruits and vegetables, and rich, filling desserts, and that after the last possible crack between foods was filled in with just *one* more bite, you wanted nothing more than to curl up like a contented kitten and go to sleep? The fires of the mind burn low after a meal. This is especially true when we over-eat

How does over-eating dull the mental powers?

We might think of the body as a precisely made machine run by electricity Each part of the machine receives currents from the battery (the brain) to accomplish its task There is just so much reserve power, and *when any one* part of the machine uses more than its share, other parts are not fully supplied When we over-eat, the stomach and intestines telegraph an S O S to the substation, switches are closed, and electric currents and blood are rushed to the organs of digestion to help carry the load that gluttony compels When we eat an excessive amount of food, power is robbed from the brain from the hands and feet and from other parts of the body to supply energy to help digest and carry the extra to storage depots The extra becomes over-weight, which further burdens the heart

Not only the amount of food taken, but also its type, affects the brain Rich foods, stimulating foods, poorly cooked foods and too frequent and irregular eating all have a benumbing effect on the higher powers They pervert the *judgment* and prevent calm, rational healthy thinking and acting Grains, fruits, nuts, and vegetables are the diet chosen for us by our Creator These foods prepared as simply and naturally as possible, are the most healthful and nourishing They give a strength, a power of endurance, and a vigour of intellect not provided by a more complex and stimulating diet There is a scientific connection between health-giving obedience and success-giving character

Will power has a very interesting relation to health The will is the governing power in man As the president of the body corporation it holds the gavel of choice After balancing electrical votes from myriads of cells, the will decides

If this will power is weak, other powers such as the imagination may gain control If this abnormal imagination keeps saying "You are sick You are sick, much nearer bed than yesterday," what can the weakened will do? Since the will is the spring of all action, inaction is the order of the day This is one *reason why thousands have such* poor resistance to disease and invalidism is so common By willing to get up and walk and live, the body naturally is invigorated to will again This starts the wheels of buoyant health turning, slowly at first, then more rapidly, until life once more becomes a happy adventure

The will is definitely important in building buoyant health But should it always reign supreme in our lives?

The question of control of the will has troubled even such great men as the apostle Paul In his letter to the Christians at Rome he paints a picture that mirrors experiences of all human beings, a picture of the struggle between the will to do good and the desire to do evil How is President Will to decide *whether* the counsel of Duty or of Desire is to be obeyed? This is the point where man feels most keenly the absolute need for authority outside himself to define truth, duty, and right And this is the function of *conscience*, that *inborn function that is the voice of* God to the soul

It is the mind of man that glorifies God Its billions of sensitive cells see trees by lakes, hear water surging over rocks, remember vacations, and plan for the future *It is in the temple of the mind that* we choose the best, believe the right, and worship our Creator Truly, the mind is the measure of the man and the summit of all creation

And remember Health is not a gift, it is an achievement

THE ORIENTAL WATCHMAN AND HEALTH HERALD

INDEX FOR 1955

Health and Home

Supplement

Kiddies' Korner

Doctor Says

Homemakers' Helps

What's in the News?

Home Nursing

Minute Meditations

Editorials

ATOMS OF FERTILITY

(Continued from p. 2.)

The use of tracer atoms has made it possible to substantiate and widely apply the method of surface, non-root, top dressing of cotton increasing its yield by thirty per cent

By means of tracer atoms it has been established that phosphorous top dressing considerably increases the yields not only of sugar beet and cotton but also of potatoes, and nitrogen salt top dressing greatly increases the yields of cabbage and other vegetables

Magnificent prospects are opening up to agronomists in the direct use of the energy of radioactive radiation for raising the yields of farm crops The first experiments of irradiating plants and their seeds have shown that in the roots of beet, for example, gamma rays increase the sugar content, buckwheat, as a result of gamma-ray irradiation grows larger and blossoms a week earlier Irradiation of plant seeds steps up the growth of the plants and may increase their yields by up to twenty per cent

Rays emitted by certain radioactive atoms kill micro organisms They can therefore be used for cold sterilization of products Raw meat, fish, and dairy products, as well as fruits and vegetables can be preserved for a long time after radioactive irradiation Thus, p o t a t o e s, for instance, irradiated by radioactive cobalt are preserved well for a whole year, fully retaining their nourishing value and flavour Radioactive irradiation similarly preserves carrots, onions, and other vegetables

TRACER ATOMS IN ANIMAL KINGDOM

Through the aid of tracer atoms zootechnicians investigate calcium and phosphorous metabolism in the organism of cattle, determine the amount of active phosphorous in the blood, the role of cobalt in the tissues of the animals, etc The new investigation method helps to work out better feed rations to increase the productivity of livestock

Tracer atoms may be used also on living organisms. In fish breeding, for example, the fry before discharge into rivers, lakes, etc, are kept for three hours in phosphorous-containing water This is enough time for the phosphorous to penetrate into the organism and get into the bones, scales, fins By the amount of "radioactive" fish caught a few months later it is determined how much of the fry let out in the river reached the sea

In a similar manner agricultural pests, insects and parasites, are marked

An experiment was carried out with a colony of flies After keeping them for several days without water they were given to drink a radioactive phosphorous-containing solution of sugar and then they were let loose They displayed unusual flight ability At 5 p m they were let out in a house of a village, and by night the "radioactive" flies could be found in all the other houses of the village, and the next day several kilometres away By such experiments it is possible to study the life and habits of a great variety of insects

This method has made it possible to find out the flight range of "radioactive" locust, determine the zone of mosquito spreading, investigate the movement of insects in the soil and of parasites in the bodies of animals

Tracer atoms are used to study the degree of poison penetration in the organisms of plants, insects and rodents, to determine the necessary doses of insecticides for the effective extermination of farm pests

All this greatly facilitates the protection of plants against pests, and helps to ensure rich harvests

Science provides agriculturists with mighty facilities promoting their effort for higher output of farm products

CURING THE DRUG HABIT

(Continued from p 15)

drug is very harmful to him He may cut down on the quantity of tobacco consumed for a while, but he will say that he simply cannot quit

Many a man when strongly admonished by his physician to quit smoking if he would save his life has continued to smoke—and sacrificed his life Many a man with Buerger's disease, when told positively that he must stop smoking or lose his legs by gangrene, has continued to smoke secretly—and has had to have his legs amputated

The same rules apply to the habitual user of alcohol or opium There are so many ways in which these drugs are harmful to health and happiness that sooner or later the user of them realizes these facts and wishes he had never begun their use The boy or girl who has recently begun to acquire a drug habit, such as drinking or smoking, should consider these facts seriously and destroy this addiction and habit reflex *now,* before they become fixed and hard to overcome.

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CHALLENGE OF BIBLE PROPHECY

OTIS B EDWARDS

"THE most famous and the most influential book in human history is the Bible" So wrote George W Crane, psychologist and newspaper columnist, in the Cleveland *News*

In that statement Dr Crane spans more than three millenniums and second rates thousands of perennially good books And it seems that there is no possibility of refuting his claim

There are legions of men and women throughout the world who agree with this judgment with respect to the Bible They are people who would stand up in the face of death to preserve its existence History records a demonstration of like devoted loyalty during the dark period of mediæval persecutions when the blood of moral heroes was shed because they refused to denounce it and its precepts No other book has been so persistently defended No other book has had so many determined foes Every conceivable weapon has been used to discredit its value The character of its authors has been maligned, its historicity has been questioned, its doctrines have been mutilated and its annihilation was very nearly accomplished by the close of the eighteenth century, when Bibles were gathered and publicly burned during the debacles leading up to the French Revolution

But the ashes of these Bibles were not dead They were wafted across the seven seas and like seeds took root and sprang up a thousand to one Quite contrary to the prophecies of its opponents, who declared that it would soon become extinct, it catapulted onto a pinnacle of prominence during a single generation Today it is found in more countries and is translated into more languages and dialects than any other written document Its supporters are found in every stratum of society

Where is the miracle of its power to survive the ravages of time? the revolutions of custom? the instability of ideals? and the deadly attacks of its enemies? Certainly it is not the lustre of its human authors Most of them would not be known were it not for the few pages they wrote for its compilation Their material equipment in some instances seems nil They, about forty in number, represent a cross section of human society, from peasant to king, from fishermen to scientific peerage

The Bible's first pages were written by a prince reared in the luxurious palace of an Egyptian monarch His education though the best of his day, was saturated with mysticism and idolatry The last pages were written by a fisherman in the land of a subjected people The first writes of Paradise lost, the last, of Paradise restored, and there is an equal depth of content and a comparable grandeur of presentation

The miracle of the Bible's power to stand unchanged and unchangeable lies in its divine inspiration It contains truth and truth is impregnable It gives history in *advance* No other book gives unerring detailed accounts of future events Indeed it is God's power to foretell that still challenges the wise men of the world

The authors of the Bible take no credit to themselves Paul makes a sweeping statement, "All Scripture is given by inspiration of God, and is profitable for doctrine, for reproof for correction, for instruction in righteousness" 2 Timothy 3 16 Peter elaborates, 'Knowing this first that no prophecy of the Scripture is of any private interpretation For the prophecy came not in old time by the will of man but holy men of God spake as they were moved by the Holy Ghost" 2 Peter 1 21

When men do not want to receive God's Word they set themselves to the task of annulling it Jehoiakim, king of Judah, took the word of the Lord sent to him through Jeremiah and burned it because it contained a message he did not want to hear Immediately God told Jeremiah to rewrite it Puny man will not learn that he cannot stop the Word of the Lord Today there are those who question this or that portion of Scripture, and who doubt the veracity of certain historical data But in God's own time and way He vindicates His Word

For a long time certain scholars contended that the forty or more references Bible writers made to the Hittite nation were absurd They "proved" their contention by the fact that secular history records no such nation But in 1906 the archæologist Hugo Winckler unearthed a Hittite capital at Borghazkeui, along with tablets proving that not only did the Hittites exist, but also that they were a mighty nation, thus warranting so much mention in sacred history One tablet tells of a treaty made with Rameses II, a Pharaoh of the Hebrew oppression

It matters little who wrote what or when it was written The fact remains that it was dictated by the Holy Spirit Much of it was written millenniums before the events described came to pass, and yet even infidel historians record their fulfilment It would take a good sized volume to expound all the prophecies of the Bible and give the necessary historical data

Thirty five hundred years ago Moses wrote of the present plight of the Jews 'And the Lord shall scatter thee among all people, from one end of the earth even unto the other, and there thou shalt serve other gods, which neither thou nor thy fathers have known, even wood and stone Among these nations shalt thou find no ease, neither shall the sole of thy foot have rest but the Lord shall give thee there a trembling heart, and failing of eyes, and sorrow of mind: and thy life shall hang in doubt before thee, and thou shalt fear day and night and shalt have none assurance of thy life."

God, through His prophets, pulls back the curtain and reveals the future to His children

Deuteronomy 28 64, 66 "For from the top of the rocks I see Him, and from the hills I behold Him. lo, the people shall dwell alone, and shall not be reckoned among the nations" Numbers 23 9 "And yet for all that, when they shall be in the land of their enemies, I will not cast them away, neither will I abhor them, to destroy them utterly, and to break My covenant with them for I am the Lord their God" Leviticus 26 44 "My God will cast them away, because they did not hearken unto Him· and they shall be wanderers among the nations" Hosea 9 17 "And I will deliver them to be removed into all the kingdoms of the earth for their hurt, to be a reproach and a proverb, a taunt and a curse, in all places whither I shall drive them." Jeremiah 24·9

In these texts the reason for their plight is given—"because they did not hearken unto Him" They were to be dispersed among the nations; cast away, but not utterly, they were not to amalgamate with these nations, they were to see destruction, but not annihilation, they were to be wanderers, restless, and fearful for their lives What other nation has been so hated, persecuted, hounded, and ruthlessly slaughtered for centuries, and yet remained separate, distinct, and prolific as the Jews? A score of nations who persecuted them have sunk into oblivion, but scattered throughout the nations of earth are the descendants of Abraham, with the visible evidences of Jehovah's blessings notwithstanding! For God had prophesied that He would not break His "covenant with them," to destroy them utterly

On the brighter side of the prophecies concerning Israel are the promises to bless whatever obedience they render It is a noted fact that the penal and mental institutions are not overrun with Jews in the countries where they dwell On the other hand, we find them rising to the top Part of the "covenant" is, "The Lord shall make thee the head, and not the tail." Deuteronomy 28:13 To mention a few top positions held by them, we list. musicians—Mendelssohn, Rubenstein, etc, scientists—Herschel, Weizmann, Einstein; financiers—Rothschild, Beaconsfield; and scores of merchants The discoveries of their physicians have helped in no small way to revolutionize medicine. They developed the use of insulin, cocaine, Wassermann test, and serums

In Palestine Jesus declared, "Salvation is of the Jews" John 4·22 It was from a pure line of Jews that the Bible flowed in its making for over fifteen hundred years Jesus said of the Scriptures, "Heaven and earth shall pass away, but My words shall not pass away" Mark 13 31 It is a thrilling study in history to trace this classic through the centuries and see how miraculously it has been preserved

History attests to its inspiration, reformed lives testify to its power to recreate man in the image of his Creator The marvel is that more men do not avail themselves of the answers it affords to the perplexities of today It has no less power than it had when Paul wrote to Timothy "And that from a child thou hast known the Holy Scriptures, which are able to make thee wise unto salvation through faith which is in Christ Jesus" 2 Timothy 3 15

CHURCH GROUPS PRAISE "ATOMS FOR PEACE" CONFERENCE

WASHINGTON, D C—Church groups, ever alert to action that will bar the use of atomic power for military purposes, have voiced great satisfaction over the results of the "atoms for peace" conference in Geneva, convened as the result of a proposal made by President Eisenhower

The Vatican delegation to the conference said that "thanks to God, the first step has now been taken on the path to the peaceful use of atomic energy"

The International Federation of Christian Trade Unions, which had two observers at the historic meeting, visualized that the conference might usher in a new and beneficial industrial revolution

It expressed hope that this resolution will take into account the "human

dignity of workers" and seek to eliminate social distress throughout the world.

The statement of the Vatican delegation was issued by its chairman, Professor Henri Medi, director of the Italian National Geophysical Institute He made these points

1 Nuclear energy should be used first to help the poorest people and regions of the world

2 Concerted action should be taken so that the upheavals caused by the evolution of nuclear science should respect the "rhythm" of man and not disrupt his "dignity"

3 The object of nuclear development must be "authentic peace based on love among mankind"

Professor Medi praised the Geneva conference for its "concern for truth, generosity in communicating the results obtained and, above all, its conviction that all discoveries in this field belong to all men so that they may turn them to their good"

The International Federation of Christian Trade Unions, largely a Roman Catholic body, pledged to help make the increased productivity of labour resulting from the use of atomic energy contribute to a rise in the living standards of the working masses

Like the Vatican delegation it urged that nuclear raw materials be put at the disposal of all peoples, with the least developed countries given priority

The Federation also called for the creation of an international agency, under the auspices of the United Nations, for the peaceful uses of atomic energy

Protestant and Roman Catholic leaders, who have virtually the same outlook on atomic energy problems, set a religious tone for the Geneva conference Two big services of intercession for the conference were held in Geneva, one Protestant and one Roman Catholic Both were attended by many of the scientists and government officials present at the meeting

Meanwhile *Osservatore Romano*, Vatican newspaper, hailed the Geneva conference as a step toward the "co-existence in truth" urged by Pope Pius XII in his 1954 Christmas message

Osservatore said the conference had abandoned the "terrifying field" of atomic weapons to enter a fruitful area in which atomic energy can become a means of progress for all mankind.

Hope In a Dark Hour

LOUIS K. DICKSON

THE greatest need of the world is for spiritual light and power Never before was the cry so loud and so pleading Many are wistfully looking for a sure word of direction that will lead to hope and the way out of human perplexity

Has Jesus of Nazareth anything to offer this generation? Is there a present day application to His words which can bring peace and comfort to the hearts of men who face all the uncertainty and confusion of this modern world? The answer must be in the affirmative, in the light of the fact that much of what Jesus said during His ministry on earth was directed to the days preceding His second advent

His words proffer the one hope of the world He it was who said to the disciples in the midst of their fears and disappointments as He was about to leave them "Let not your heart be troubled ye believe in God, believe also in Me" John 14 1

It is because men's belief in God has been shaken and well nigh lost that hearts are filled with uncertainty, insecurity, and fear This must not happen, He says Whatever the circumstances, continue to believe in the existence and goodness of God It is when God is forgotten that minds become obsessed with present emergencies and problems which bring distraction and confusion

'Believe in God, believe also in Me" said Jesus How nearly that word fits the expression of the Apostle Paul when he wrote, "He that cometh to God must believe that He is, and that He is a rewarder of them that diligently seek Him" Heb 11 6 God would have all know that He is ready to establish firm grounds for belief in Him

The apostles did not appreciate these truths fully until they had passed through the experience of Pentecost They remembered the promise of their Master when He foretold the coming of the Comforter and directed them to tarry in Jerusalem until they should be endued with power from on high They took His promise seriously and in prayer sought for the promised power They were not disappointed Power came beyond their fondest expectations, the Christian church was established and went forth "conquering, and to conquer"

The promises for the present hour are as certain and plain With the Apostle Peter Christians can confidently declare, 'We have also a more sure word of prophecy, where unto ye do well that ye take heed, as unto a light that shineth in a dark place, until the day dawn, and the daystar arise in your hearts" 2 Peter 1.19

It is high time for all who profess to follow the Master to renew their confidence in Him and, "rejoicing in hope," declare His promises for this hour A new witness from the church is due the waiting, anxious world, a new declaration that over all the disobedience of man, over all the compromises and mistakes of professed Christians, over all the tumult of nations, God rules calm, steadfast, and faithful A new call must be made to this generation, inviting all to surrender to the holy will of Him who would not "that any should perish, but that all should come to repentance" 2 Peter 3 9

Mankind needs to know that the inspired writers of the Bible wrote that which fits the problems of these changing times As the writer of the Book of Hebrews says, "The Word of God is quick, and powerful, and sharper than any two edged sword, piercing even to the dividing asunder of soul and spirit, and of the joints and marrow, and is a discerner of the thoughts and intents of the heart Neither is there any creature that is not manifest in His sight but all things are naked and opened unto the eyes of Him with whom we have to do' Heb 4 12, 13 From this it is plain that God not only sees all of the problems that perplex, but that He has a plan by which the tangles will all be unravelled

Do not hesitate to learn and accept what the Bible has said concerning

the causes and cures of human ills. Man's word has proved inadequate; try therefore God's Word. All the cataclysmic events of these modern days are explained in His Word. What is needed more than anything else is to listen to the voice of God and be led by the Spirit of God. The problems are too great for man to solve by himself

By his skill and learning man has invented instruments by which he can annihilate himself, and unless there arises one who is mightier than all men's devisings, there can be no hope for the race. But, thank God, there is One mightier than armies, mightier than all the deadliest weapons of destruction, mightier than the most formidable combination of all evil men and demons, One who declared, "All power is given unto Me in heaven and in earth" Matt 28:18 He it is who, breaking through the hopeless clouds engulfing men to day, says, "Behold, I come quickly, and My reward is with Me, to give every man according as his work shall be" Rev 22 12

YOU AND THE BOOK

What Faith Can Do for You

Alma L Tibbs

1. Mark 9 23—Faith conquers all difficulties

"Jesus said unto him, If thou canst believe all things are possible to him that believeth"

2. Matthew 17:20—Jesus said that faith can accomplish the impossible

"And Jesus said unto them ... I say unto you, If ye have faith as a grain of mustard seed, nothing shall be impossible to you"

3 Genesis 4 3 7—An early example of faith

"And ... Cain brought of the fruit of the ground an offering unto the Lord And Abel, he also brought of the firstlings of his flock and of the fat thereof And the Lord had respect unto Abel and to his offering But unto Cain and to his offering He had not respect"

4. Genesis 6 13 22—In obedience to God's command, Noah built a huge boat on dry land

"And God said unto Noah, The end of all flesh is come before Me, for the earth is filled with violence through them, and, behold, I will destroy them with the earth Make thee an ark of gopher wood ... Thus did Noah"

5 Hebrews 11 7—His faith preserved his entire family

"By faith Noah, being warned of God of things not seen as yet, moved with fear, prepared an ark to the saving of his house"

6 Hebrews 11:24, 25—Moses' faith led him to forsake heirship to the throne of Egypt

"By faith Moses, when he was come to years, refused to be called the son of Pharaoh's daughter, choosing rather to suffer affliction with the people of God, than to enjoy the pleasures of sin for a season"

7 Jude 9—This faith God honoured by raising him from the dead

"Yet Michael the archangel, when contending with the devil He disputed about the body of Moses, durst not bring against him a railing accusation, but said, The Lord rebuke thee"

8 Joshua 3 15 17—The Jordan River opened to Israel in response to their faith

"And as ... the feet of the priests that bare the ark were dipped in the brim of the water, ... the waters which came down from above stood and rose up upon an heap ... and those that came down toward the sea of the plain, even the salt sea, failed, and were cut off and the people passed over right against Jericho"

9 1 Kings 17 21-23—In answer to Elijah's faith, God restored to life the son of the widow of Zarephath.

"And he stretched himself upon the child three times, and cried unto the Lord, and said, O Lord my God, I pray Thee, let this child's soul come into him again And the Lord heard the voice of Elijah, and the soul of the child came into him again, and he revived. And Elijah said, See, thy son liveth"

10 Daniel 3:23-27—The faith of the three Hebrew boys enabled them to conquer the flames

"And these three men, Shadrach, Meshach, and Abed-nego, fell down bound into the midst of the burning fiery furnace Then Nebuchadnezzar the king was astonished, and rose up in haste, and spake and said unto his counsellors, Did not we cast three men bound into the midst of the fire? They answered and said unto the king True, O king He answered and said, Lo, I see four men loose, walking in the midst of the fire, and they have no hurt, and the form of the fourth is like the Son of God ... And the king's counsellors, being gathered together, saw these men, upon whose bodies the fire had no power, nor was an hair of their head singed, neither were their coats changed, nor the smell of fire had passed on them"

11 Daniel 6 23—Daniel's faith made lions subject to him for an entire night

"Then was the king exceeding glad for him and commanded that they should take Daniel up out of the den So Daniel was taken up out of the den, and no manner of hurt was found upon him because he believed in his God"

12 2 Peter 1 5-11—Faith is the ground upon which rests the ladder that reaches to the kingdom of God

"And beside this, giving all diligence, add to your faith virtue, and to virtue knowledge, ... for so an entrance shall be ministered unto you abundantly into the everlasting kingdom of our Lord and Saviour Jesus Christ"

13 John 11 42—Jesus had faith

"And I knew that Thou hearest Me always but because of the people which stand by I said it that they may believe that Thou hast sent Me"

14 Revelation 14 12—Some have the faith of Jesus

"Here is the patience of the saints here are they that keep the commandments of God, and the faith of Jesus"

15 1 Peter 1 9—This faith will bring salvation

"Receiving the end of your faith, even the salvation of your souls"

16. Luke 17 5—A daily prayer.

"Increase our faith"